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## NATURALISM AND SUBJECTIVITY

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VRIJE UNIVERSITEIT

# Naturalism and Subjectivity

## A Philosophical Analysis

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan  
de Vrije Universiteit Amsterdam,  
op gezag van de rector magnificus  
prof.dr. L.M. Bouter,  
in het openbaar te verdedigen  
ten overstaan van de promotiecommissie  
van de faculteit der Wijsbegeerte  
op dinsdag 7 december 2010 om 9.45 uur  
in het auditorium van de universiteit,  
De Boelelaan 1105

door

Kiki Berk

geboren te Amsterdam

promotor: prof.dr. R. van Woudenberg  
copromotor: prof.dr. L. Stubenberg

## CONTENTS

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Acknowledgments    *ix*

Introduction    *xi*

### 1 The Subjectivity of Experience    *1*

- 1.1 Nagel's Account of Subjectivity    *3*
  - 1.1.1 Nagel on the Subjectivity of Experience    *4*
  - 1.1.2 Point of View and Knowing What It Is Like    *8*
- 1.2 Other Accounts of Subjectivity    *13*
  - 1.2.1 More Definitions of Subjectivity    *14*
  - 1.2.2 Mapping onto De Sousa    *19*
  - 1.2.3 How Other Accounts Fit (S1)-(S5)    *25*
- 1.3 Subjective-Making Properties    *34*
  - 1.3.1 Does Experience Have These Subjective-Making Properties?    *34*
  - 1.3.2 Do Other Mental Phenomena Have These Subjective-Making Properties?    *40*
- 1.4 Conclusion    *46*

### 2 Do Experiences Exist?    *49*

- 2.1 What Are Experiences?    *50*
  - 2.1.1 The Term 'Experience'    *50*
  - 2.1.2 Kinds of Experiences    *52*
  - 2.1.3 Structure of Experiences    *53*

2.2	Contra: Arguments against the Existence of Experience	56
2.2.1	Argument from Awkwardness	56
2.2.2	Byrne's Argument against Experience	57
2.3	Pro: An Argument for the Existence of Experience	64
2.4	First Reply: Behaviorism	74
2.5	Second Reply: Eliminativism	79
2.6	Conclusion	85
3	<b>Metaphysical Naturalism</b>	87
3.1	Definitions of Materialism, Physicalism and Naturalism	88
3.2	Mapping onto the Literature	98
3.3	Varieties of Naturalism	106
3.4	Distinctions within Metaphysical Naturalism	111
3.5	Four Kinds of Metaphysical Naturalism	115
3.5.1	Classical Materialism	116
3.5.2	Spatio-Temporal Materialism	117
3.5.3	Causal Materialism	118
3.5.4	Anti-Supernaturalism	120
3.6	Conclusion	123
4	<b>Methodological Naturalism</b>	125
4.1	Definitions of Methodological Naturalism	126
4.2	Methodological Naturalism: View, Stance or Research Program?	131
4.3	Hempel's Dilemma	135
4.4	Two Other Problems	142
4.5	Does Methodological Naturalism Entail Metaphysical Naturalism?	144
4.6	The Objectivity of Science	149
4.7	Conclusion	165
5	<b>Are Subjectivity and Naturalism Compatible?</b>	167
5.1	(S1): Phenomenal Character of Experience	169
5.2	(S2): A Single Point of View	170
5.2.1	Argument from Perspective	170
5.2.2	The Knowledge Argument	174
5.2.3	Nagel's Argument	179
5.3	(S3): Argument from Privacy	188
5.4	(S4): Knowledge of Experience	192
5.5	(S5): Dualist Argument: Persons	196

5.6	Objections & Replies	198
5.6.1	Objection I: Lycan	198
5.6.2	Objection II: Identity Theory of Mind	206
5.7	Alternative Approaches	211
5.7.1	Chrisley: Objectivity as Intersubjectivity	211
5.7.2	Velmans: Objectivity as Intersubjectivity	213
5.7.3	Howell: Subjective Physicalism	216
5.8	Conclusion	218
Summary		221
Bibliography		223
Samenvatting – Summary in Dutch		231





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The first (two page) philosophy paper I ever wrote was for René van Woudenberg's class 'Introduction to Metaphysics', which I took my first semester of college. I wrote on dualism and physicalism; in particular, I tried to come up with arguments against physicalism, which I thought was an underdeveloped topic in the book we read for the class, Peter van Inwagen's *Metaphysics*. Little did I know that four years later I would be taking a class with Van Inwagen himself and, soon afterwards, starting a four-year research project about the problems of physicalism (which I now prefer to call 'naturalism'). It has been ten years since I wrote my first philosophy paper and four years since I started working on this dissertation, and I am happy to report that I am still fascinated by the same topic.

Over the past four years I have learned a great deal about naturalism and subjectivity, how to do (and not to do) research, how to write more clearly, and how to overcome 'feeling stuck'. But most of all I have learned that it takes determination and discipline to write a dissertation. Yet discipline and determination, though necessary, are not, in my experience, sufficient for success. I could not have written this dissertation without the help and support of many others, whom I am greatly indebted to and would like to thank here.

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## INTRODUCTION

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The main question that this dissertation aims at answering is whether the subjectivity of experience is compatible with naturalism or not. In order to be able to establish this, two sub-questions need answering first: What is the subjectivity of experience? And: What is naturalism? However, before doing even so much, we need to pause and consider why one should care to ask the question whether the subjectivity of experience is compatible with naturalism.

Let me give a short summary of the answer before going on to explain it in more detail. A great many philosophers think that the subjectivity of experience is a very important phenomenon, not just in theory or for philosophy, but also in and for (daily) life. Because this real-life phenomenon is so important, it ought to have its place in, or at least be compatible with, any metaphysics or ontology that is to be taken seriously, especially one which is frequently adopted and enjoys popularity. Nowadays the ontology that is by far the most popular is naturalism; virtually everyone, scientists, philosophers and laymen alike, claim to be naturalists, a trend which will most likely only expand in the near future. Given the importance of the subjectivity of experience and the popularity of naturalism, whether the phenomenon of subjectivity can be accounted for or have its place within a naturalistic ontology is a relevant and pressing question. Maybe unnecessary to add, I think that it is very important for this phenomenon to be compatible with this theory, and if it is not, I think this is a good reason to reject naturalism.

The main part of this introduction will be spent giving the long answer to the question we have just answered briefly. The question why we should care about this project breaks up into three preliminary questions: Why and how is the subjectivity of experience important? This will be addressed in section 1.

Why would we want to know whether it is compatible with naturalism in particular, instead of with a different ontology? This will be addressed in section 2. Finally, what can we say about the relation between the subjectivity of experience and naturalism right now and what does it mean for two things to be compatible or incompatible with one another? This will be addressed in section 3.

Once we have established this project to be worthwhile, section 4 concerns the game plan, i.e. how this project is to be executed, and the road mapping, i.e. how this dissertation is organized. I will go over the functions and outlines of each chapter, present the questions that are central in it and give an overview of the answers to these questions and the conclusions we can subsequently draw.

Finally, in section 4 I will specify how this project relates to and differs from other projects and debates in its vicinity and what is unique about it.

## I WHY IS THE SUBJECTIVITY OF EXPERIENCE IMPORTANT?

My short answer to the question why we should care whether the subjectivity of experience is compatible with naturalism contains a number of controversial claims. One of these claims is: The subjectivity of experience is a very important phenomenon, not just in theory or for philosophy, but in and for (daily) life. What do I mean when I say that the subjectivity of experience is an important phenomenon? What is the subjectivity of experience, in the first place?

The question what the subjectivity of experience exactly is will be addressed in the first and second chapters in detail. For now we'll have to work with an intuitive, pre-theoretical understanding of what it means for experience to be subjective. There are many different senses in which experience can be said to be subjective (we will distinguish five), but here I will focus on one of them and see why it is important. The sense in which experience can be said to be subjective that I will focus on here is also called the phenomenal character or qualia of experience. One way to get a grasp on this concept is by realizing that there is something about experience or experiences that makes us think that they are different in kind than objects such as tables and chairs. Even though we (can) have tables and chairs, we seem to think that we have experiences in a different way. Without trying to come up with philosophical distinctions (e.g., maybe experiences are 'mental' or 'immaterial', whereas tables and chairs are 'physical' or 'material'; or maybe experiences are not objects, and tables and chairs might be), let's try to describe what is special

about having experiences. It seems that what is special about experiences is that we are so intimately related to our own experiences – more so than to our possessions – and in a way in which no one else is or can be. Moreover, we don't just have our experiences, but there is something it is like to have them. Let's look at an informal description of this aspect of 'the subjective quality of experience' by Chalmers to get a better sense of it:

When we perceive, think, and act, there is a whirl of causation and information processing, but this processing does not usually go on in the dark. There is also an internal aspect; there is something it feels like to be a cognitive agent. This internal aspect is conscious experience. Conscious experiences range from vivid color sensations to experiences of the faintest background aromas; from hard-edged pains to the elusive experience of thoughts on the tip of one's tongue; from mundane sounds and smells to the encompassing grandeur of musical experience; from the triviality of a nagging itch to the weight of a deep existential angst; from the specificity of the taste of peppermint to the generality of one's experience of selfhood. All these have a distinct experienced quality. All are prominent parts of the inner life of the mind.<sup>1</sup>

The fact that experiences are subjective in this sense thus means that experiences have an internal aspect: there is something it is like for us to have them. Granted, for now, this remains a rather vague description of the subjectivity of experience, but it will do for the purposes of the current section.

Why would one think that subjective experiences are important? I will proceed by discussing a number of reasons to think subjective experiences are important found in three different papers in the literature after which I will add some reasons of my own.

In *Knowledge, Possibility, and Consciousness* Perry offers two reasons why subjective experience is important. The first reason he gives, is that subjective experiences are our main motivation(s) for doing anything in life. Because our experiences are subjective, i.e. because there is something it is like to have our experiences, we choose to do certain things and avoid others. Let me explain. If there was nothing it was like for you to eat chocolate muffins, you would not pursue buying or baking and eating them. And if there was nothing it was like for you to be in pain, you would not make choices to avoid being in pain when you can. Because experiences are subjective we are able to pursue and/or avoid things (or situations or events) as we see fit. Needless to say, our subjective experiences are not our only motivations and do not solely determine our choices – reasoning and testimony are also important in this respect and ought to be. However, the fact that experiences have a subjective

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<sup>1</sup> Chalmers 1996: 4.

nature (or subjective character) helps us a great deal in making choices. Perry formulates this first reason to think that subjective experiences are important as follows:

Some subjective characters are very important because they are pleasant or unpleasant. Some experiences are very pleasant and others are unpleasant. This is a property they have in virtue of their subjective characters. Seeking the pleasant and avoiding the unpleasant is one of the keys to animal and human motivation.<sup>2</sup>

But subjective experiences are not only sources of motivation. Perry's second reason for thinking that subjective experiences are important is that they provide us with important information. This information includes keys about which things we like and don't like, but it goes beyond that. As Perry writes:

Some subjective characters are important because they carry crucial information. When I hit my thumb with a hammer, the fact that my thumb is in pain carries the information that there is something wrong with my thumb.<sup>3</sup>

The experience of hitting your thumb with a hammer has a subjective character in the sense that there is something it is like to hit your thumb with a hammer: it is very unpleasant. According to Perry, subjective experiences such as these do not only motivate us to avoid pain in the future (and be more careful when using a hammer), they do more: these experiences give us information. If the left side of my thumb hurts, I know this is the spot where I hit it and this is the spot that needs to be treated.

More generally, it can be helpful to consider how a doctor does her work. In addition to listening to your heart and taking an X-ray of your lungs, a doctor will ask you questions about your symptoms (i.e. your experiences of pain). Where the pain is located and whether it's a sharp or a dull pain (i.e. the way you experience your pain) is important information for a doctor, which she needs in order to form an accurate diagnosis. Subjective experiences thus carry useful information.

In the introduction to *The View From Within* Varela and Shear also make the point that the subjectivity of experience is an important phenomenon which cannot be sidestepped by science:

To accept experience as a domain to be explored is to accept the evidence that life and mind includes [sic] that first person dimension which is a trademark of our on-going

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<sup>2</sup> Perry 2001: 40.

<sup>3</sup> Ibid.: 42.

existence. To deprive our scientific examination of this phenomenal realm amounts to either amputating human life of its most intimate domains, or else denying science explanatory access to it. In both cases the move is unsatisfactory.<sup>4</sup>

In this passage, Varela and Shear call ‘the first person dimension’, of which subjective experience is at least part, ‘a trademark of our ongoing existence’, which indicates just how important it is in daily life. Varela and Shear think that subjective experiences are essential for human activity and ‘life involving the use of one’s own mind’. They also think that it is because of subjective experiences that we are able to change. As they put it:

Experience in human practices is the privileged entry point for change mediated by professional interventions of all kinds, such as education and learning, sports training, and psychotherapy.<sup>5</sup>

By recognizing that we have subjective experiences and by working with them we can change; teachers, (sport) coaches and psychotherapists can help us achieve this. A doctor’s work would be harder if subjective experience was not recognized; the work of teachers, sports coaches and psychotherapists would be impossible.

In considering the importance of subjective experiences, the aesthetic aspect should not be overlooked. In *The Mental and the Physical* Feigl records this dialogue between Einstein and himself:

Feigl: wouldn’t the qualities of immediate experience be left out in a perfect physical representation of the universe?

Einstein: Why without them, the world would be nothing but a pile of [dirt]!<sup>6</sup>

Without subjective experience (i.e. the ‘qualities of experience’) we would not be able to enjoy and appreciate art or any beauty in the world. After all, aesthetic experience would not be possible if experience wasn’t subjective. The value of art, poetry and theatre could not be recognized without subjective experience and, in so far as this value depends on our recognition of it, there would not be any such value. Not just the beauty and value of art, but the beauty and value of anything in (daily) life depends (partly, obviously) on our ability to have aesthetic experiences. Without the smell of coffee, the way we see the sunlight shine on the trees, the taste of food, the sound of music,

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<sup>4</sup> Varela & Shear 1999: 4.

<sup>5</sup> Ibid.

<sup>6</sup> Feigl 1958.



and so on, the world would be a dreary and dark place. Similarly, it can be questioned if spiritual and religious experience would be possible if experience was not subjective.

In addition to the reasons discussed above, which reasons do I personally have for thinking that the subjectivity of experience is so important? I think it is so important because it is through experiences that we know the world and, in this sense, experiences are the part of the world with which we are most familiar. And, not just the world but also our life or consciousness consists, in a sense, of all our experiences strung together. Even though we (can) consciously interpret our experiences, the way they seem to us, or what it is like to have them, colors the way we perceive the world and our lives. Moreover, the fact that there is an 'inner aspect' to experience, to borrow Chalmers' term, is, despite its familiarity, so puzzling and fascinating when we stop and think about it. Why and how do we have experiences at all? And is there a sense in which we can share our experiences, or can we not escape living in our own worlds to a certain extent? I think it is fascinating that there are subjective experiences in the first place and I think it is crucial to understand them and their place (in a naturalistic world) better.

## 2 WHY NATURALISM?

Why are we interested in knowing whether the subjectivity of experience is compatible with naturalism and not with any other ontology? There are two reasons for focusing on naturalism.

First, as I pointed out in my short answer to the question why one should care about this project, the ontology which is by far the most popular today is naturalism. As said, virtually everyone, scientists, philosophers and laymen alike, claims to be a naturalist, or for that matter, a physicalist or a materialist. Naturalism, physicalism and materialism are views that are very closely related, as will be extensively discussed in Chapter 3. Whatever the cause of this popularity, which might be due to fashion or to the arguments in favor of this view (or a combination of both), naturalism is everywhere and it seems that it will be for at least a while. Because it is so popular, questions concerning naturalism are highly relevant and important to be asked. Potential problems or threats to the view should be carefully considered since whether they can be averted concerns many people, i.e. naturalists.

Second, on the surface, there appears to be a tension between naturalism and the subjectivity of experience. It is often assumed or mentioned that the subjectivity of experience is a problem for naturalism without explaining ex-

actly why and how it is. The fact that there is surface tension together with the fact that it is not often made explicit why exactly the subjectivity of experience and naturalism don't go together calls for an in-depth analysis. To ask whether the subjectivity of experience is compatible with dualism or idealism is a less interesting question since it most likely is compatible and, in any case, we can easily see how it could be.

### 3 LOGICAL COMPATIBILITY

We have seen why one would care to ask whether the subjectivity of experience is compatible with naturalism. But is this not a simple question we can answer right now and here? Unfortunately it is not. For some reason it is not easy to see right away whether the subjectivity of experience and naturalism are compatible. Searle has written about this:

We are not in agreement about how to fit these subjective feelings into our overall view of the world as consisting of objective reality.<sup>7</sup>

And:

[A third difficulty in our present intellectual situation is that] we don't have anything like a clear idea of how brain processes, which are publicly observable, objective phenomena, could cause anything as peculiar as inner, qualitative states of awareness or sentience, states which are in some sense "private" to the possessor of the state.<sup>8</sup>

Both these passages lean in the direction of an incompatibility. However, it is not the case either that the subjectivity of experience and naturalism are obviously incompatible. For example, Feigl has written that there is no logical inconsistency here:

(...) the terms "subjective" and "private" (...) in one of their commonly and proper serviceable usages are not to be considered as logically incompatible with "objective" or "public." (...) Private states in this philosophically quite innocuous sense are then simply *central* states.<sup>9</sup>

There is thus no consensus whether or not there is an incompatibility between naturalism and the subjectivity of experience. However, by careful conceptual

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<sup>7</sup> Searle 1997: 8.

<sup>8</sup> Ibid.

<sup>9</sup> Feigl 1958: 32.

analysis and detailed study, we will be able to find the answer to this question. In order to do so, we need to understand what it means for two things to be compatible. What does it mean for a particular theory and a phenomenon to be 'compatible' with one another?

We use the term 'compatibility' not just to talk about whether a particular theory and a particular phenomenon go together, but we also use it when we consider the compatibility of two theories, or of personality types, or of kinds of food. Two theories are compatible when no elements of the theories contradict one another; two personality types are compatible when there is no principled conflict caused by their differences; two kinds of foods are compatible when their combination does not give rise to a disagreeable taste. Not surprisingly, then, there are different kinds of compatibility. The compatibility we are here interested in is logical compatibility. There is no consensus about what logical compatibility exactly means and entails, but we will be using an intuitive understanding of this concept which boils down to logical consistency. When are two things logically consistent?

Two things are logically consistent when they don't contradict one another. In line with this, for a theory and a phenomenon to be compatible, it is a necessary condition that the theory does not entail that the phenomenon does not exist, or, in other words, it is a necessary condition that the phenomenon does not have any properties that the theory rejects. But is it a necessary condition for a theory and a phenomenon to be compatible that the theory can give an account of the phenomenon? That is, does a theory need to provide an explanation of a phenomenon in order for the theory and the phenomenon to be considered compatible? I think that a theory does not need to include an explanation of the phenomenon, but it should in principle be possible for a theory to include such an explanation if the theory and the phenomenon are to be compatible. For example, if a theory contains certain elements such that an explanation of the phenomenon could in principle not be given, then a theory and a phenomenon are incompatible unless, of course, the explanation could not be given for reasons other than ones obtaining or following straight from the content of the theory, such as, for example, our limited cognitive abilities. However, if such principled barriers are absent, a theory and a phenomenon could be considered to be compatible also if an account of the phenomenon has not been provided (yet) by the theory. What we are looking for, then, is not so much whether the theory of naturalism can account for the phenomenon of subjectivity, but rather if there are any elements in the theory of methodological naturalism that, in one way or another, contradict or show conflict with the phenomenon of subjectivity.

#### 4 OUTLINE OF THE DISSERTATION

This dissertation consists of five chapters. The first two chapters concern the subjectivity of experience; the second two are about naturalism. In the final chapter I ask the question whether the subjectivity of experience and naturalism are compatible and I conclude that they are incompatible.

The aim of the first chapter is to clarify the notion ‘subjectivity’. The term ‘subjectivity’ or ‘subjectivity of experience’ or ‘subjectivity of the mental’ is often used, but it is not always clear what exactly is meant by this term. What is ‘subjectivity’? In order to find out, I will discuss a number of definitions of the subjectivity of experience that are given in the literature and some further definitions suggested by the discussion of those (S1–S5). Since Nagel’s account of subjectivity in his paper “What is it like to be a bat?” is a classic in this field, I start out by analyzing Nagel’s account. After inventorying a list of definitions of experience, I turn to the question whether experience is actually subjective in any of these senses. By coming up with examples of each sense in which experience could be said to be subjective, I will show that experience is in fact subjective in all these senses. I conclude the chapter by considering, only briefly, whether other mental phenomena have the same subjective-making properties as experience does. I conclude that they almost all do.

We now know what the subjectivity of experience means, but are there such things as experiences? This is the main question of Chapter 2. If there are no such things as experiences, then there is no incompatibility between the subjectivity of experience and naturalism either. I start out by considering arguments against the existence of experience, followed by a powerful argument for the existence of experience. This argument is an adaptation of Van Inwagen’s argument for the existence of properties and it turns on Quine’s criterion of ontological commitment. According to Quine, anything that we quantify over exists. This means that we have to say that experiences exist since we quantify over experiences in ordinary and scientific sentences which we genuinely endorse. The only ways out would be to either eliminate or paraphrase away this kind of language. Eliminativism and behaviorism, respectively, can be seen as attempts exactly to this effect, which is why I will continue with a discussion of these two theories. It will turn out that eliminativism and behaviorism face so many problems of their own that we have to conclude that they are untenable. This means that we are committed to the existence of experiences. Thus, there is such a thing as the subjectivity of experience.

We have now covered the expression ‘subjectivity of experience’ and can

move on to the next term that is central in our question: naturalism. Chapters 3 and 4 aim to clarify the notion 'naturalism'. Chapter 3 starts out discussing the closely related terms 'naturalism', 'materialism' and 'physicalism'. It will become clear that the views that are called 'naturalism' can be divided into two groups: 'metaphysical naturalism' and 'methodological naturalism'. The remainder of Chapter 3 concerns metaphysical naturalism. I will discuss various forms of metaphysical naturalism: classical materialism, spatiotemporal materialism, causal materialism and anti-supernaturalism. It will turn out that none of these versions of naturalism is tenable and therefore that metaphysical naturalism, generally, is not tenable. The question whether or not the subjectivity of experience is a problem for metaphysical naturalism does not even arise.

In Chapter 4 I go on to consider if methodological naturalism is more successful than its metaphysical counterpart. I will start out by getting clearer on the meaning of the term 'methodological naturalism' and by making some necessary distinctions. I will then ask the question whether the kind of methodological naturalism that we formulated is in fact a tenable and credible position. I will conclude that there are some serious issues but that they can be sidestepped, as I will show, so that we can still work with the formulation of naturalism as we found it. Now that methodological naturalism has turned out to be a tenable position, we need to know what its ontological consequences are. After all, we want to know whether methodological naturalism is compatible with the subjectivity of experience. We will discuss the general and specific ontological implications of methodological naturalism, which will lead to a discussion of science and the scientific method and of a crucial aspect of science: 'objectivity'. I will discuss this aspect of science and the ontological implications it has and conclude that according to methodological naturalism, the only (kinds of) things that exist are public or intersubjectively available. This concludes our discussion of methodological naturalism.

Now that we know what the terms 'subjectivity', 'experience' and 'naturalism' mean, we can begin answering the question whether the subjectivity of experience is compatible with naturalism, which is the topic of Chapter 5. In this chapter we will find that some ways in which experience is subjective are incompatible with methodological naturalism as we have defined it. We will find that subjectivity in the sense of (S1), the fact that experience has phenomenal character, is incompatible with methodological naturalism in virtue of (S2), the fact that experience is perspectival. We will then turn to a full discussion of subjectivity in the sense of (S2) and conclude that (S2) is incompatible with methodological naturalism. This will lead to a formu-

lation and discussion of a number of arguments against naturalism based on (S<sub>2</sub>), including the argument from perspective, the knowledge argument, and Nagel's argument.

Subjectivity in the sense of (S<sub>3</sub>), the fact that experience is private, will also turn out to be incompatible with naturalism. We will state the privacy argument against methodological naturalism, which relies on the premise that token experience and token phenomenal character can only be had by one person, which turns out to be problematic on our reading of methodological naturalism. Subjectivity in the sense of (S<sub>4</sub>), the fact that experience is only known from a first person point of view, will also prove incompatible with naturalism and another argument against naturalism will be formulated. We will conclude that it is not clear whether subjectivity in the sense of (S<sub>5</sub>), the fact that experiences are had by subjects or persons, is compatible with naturalism without making further choices concerning the ontology of persons.

After formulating these arguments against naturalism, I will discuss objections to these arguments and replies to them. I conclude the chapter by discussing three alternative approaches, which could possibly avoid the problem; however, it will turn out to be unlikely that the methodological naturalist could adopt them. We cannot but conclude, then, that the subjectivity of experience is incompatible with methodological naturalism.

## 5 PLACING THE DISSERTATION IN CONTEXT

Finally, we need to consider how this project differs from debates in its vicinity and how it contributes to the field in which it is situated.

First, how does this project differ from and relate to debates in its vicinity such as the qualia debate and the debates about the explanatory gap and the hard problem? This project partly overlaps with the qualia debate (which I will indicate where relevant), but it is much broader than that. One way of interpreting what it means to say that experience is subjective is to say that experiences have qualia, but this is merely one interpretation. I will discuss many others as well. The explanatory gap, so called following Levine (1983), refers to the fact that there is a hiatus in (and maybe principled limit to) our understanding of how consciousness depends on something that is not conscious. Even though I will discuss properties of (conscious) experience, mainly its subjective character, I am here not concerned with the question of how these conscious experiences depend on non-conscious properties or states. The hard problem of consciousness can be summarized by the question:

‘Why is all this processing [of the brain] accompanied by an experienced inner life?’<sup>10</sup> Whereas the explanatory gap debate focuses on the relation between consciousness and non-conscious brain states, the hard problem consists of the question why there is consciousness at all, i.e. why there is an ‘inner aspect’ to experiences in the first place. Even though I will discuss experiences to a great extent in the second chapter, I will not address the question why we have them.

Second, what does this project contribute to its field? This project contributes to the literature in at least two ways. First, this project aims to clarify notions in the debate that are often used but that are nonetheless not very clear. I am thinking mainly of the term ‘subjectivity’, the meaning of which usually remains quite vague, and the term ‘naturalism’, which, for all its popularity, seems rather misunderstood. I think that the conceptual analysis that I offer in the first, third and fourth chapters can add to our understanding of these terms which are crucial in all the debates mentioned above. In addition, this project aims to clarify just how the subjectivity of experience and naturalism are incompatible, which is often touched upon but not often analyzed in depth. Hopefully, this knowledge will add to the understanding of this issue and contribute to its solution – if there is one.

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<sup>10</sup> Chalmers 1996: xii.

## The Subjectivity of Experience

It is often assumed, as well as argued for, that subjectivity is a problem for naturalism. It is nevertheless not clear what the phenomenon of subjectivity exactly is, or, to put the same point differently, what it is that makes something subjective. Nor is it obvious what the thesis of naturalism exactly is. In order to be able to establish whether or not subjectivity is a problem for naturalism, it is thus first necessary to get clearer on the notions of subjectivity and naturalism. In this chapter I will discuss the former and in Chapters 3 and 4 the latter.

The terms 'subjectivity' and 'objectivity' (and 'subjective' and 'objective' as well) play a role in many different domains. One is daily life, where we characterize judgments and attitudes as subjective or objective: 'subjective' in this respect usually means something close to biased or opinionated, whereas 'objective' has the connotations of being well-informed or impersonally evaluated. Another domain is philosophy, where the terms 'subjective' and 'objective' are used in many different areas. For example, in ethics it is often discussed whether morality is subjective or objective, and in epistemology the subjectivity or objectivity of truth is at stake. The terms are especially central to some of the main issues in philosophy of mind, where it is often asserted that there is something 'subjective' about the mind. It is this mysterious subjectivity of the mental that many claim is a problem for naturalism. However, what it means for the 'mind' or the 'mental' to be subjective is very obscure.

The etymology of the terms 'subjective' and 'objective' is unfortunately not very helpful; 'subjective' and 'objective' have a Latin origin and can literally be translated as 'thrown under' and 'thrown against', respectively. Taken literally this etymology is rather uninformative. As Lycan suggests, perhaps the terms 'subjective' and 'objective' derive from the grammatical distinction



between 'subject' and 'object'.<sup>1</sup> This would mean that to be subjective has something to do with being a grammatical subject, and to be objective has something to do with being a grammatical object. However, as Lycan points out, terms referring to the mind (and anything else for that matter) can be either grammatical subjects or grammatical objects. Therefore this cannot be the way in which the mental is distinctively subjective.<sup>2</sup> What, then, does it mean to say that the 'mind' or 'the mental' is subjective?

Actually in the philosophy of mind there are a number of different 'mental' phenomena that are said to be subjective in some sense or another: intentionality, self-consciousness, the first person perspective, secondary qualities of objects, qualia (also called 'phenomenal character') and experience. All of these have received a great deal of attention in the literature, and all of them at one time or another have been claimed to be a problem for physicalism. For example, Dretske has written on intentionality<sup>3</sup>; Rosenthal has written about self-consciousness<sup>4</sup>; Baker has written on the first-person perspective<sup>5</sup>; McGinn has written on the secondary qualities of objects<sup>6</sup>; Jackson, Chalmers, Dennett et al. have written on qualia<sup>7</sup> and Nagel has written on experience<sup>8</sup>. It goes without saying that this is only the top of the iceberg and many, many more philosophers have been involved in these debates and have written about these topics.

Rather than begin by trying to understand how each of these phenomena is subjective, since it is not obviously the case that they need to be subjective in the same sense, it seems better to focus on one specific phenomenon and determine what it means for it to be subjective. For the purpose of this chapter, I will focus on the last of these – experience. That is, in this chapter I will seek to understand what it means for experience to be subjective. More specifically, I will be attempting to identify that property (or those properties) in virtue of which experience is deemed subjective, which I will call the 'subjective-making' property(/-ies). At the end of the chapter, however, I will return to this point and consider whether the other mental phenomena might be subjective in the way in which we have found experience to be subjective, in order to establish whether or not 'the mental' is subjective in a univocal sense.

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<sup>1</sup> See Lycan 1996: 46.

<sup>2</sup> Paraphrased from Lycan 1996: 46.

<sup>3</sup> See Dretske 1995.

<sup>4</sup> See Rosenthal 1986.

<sup>5</sup> See Baker 1998.

<sup>6</sup> See McGinn 1983.

<sup>7</sup> See Jackson 1982; Chalmers 1996; Dennett 1990.

<sup>8</sup> See Nagel 1974.

This chapter consists of three major parts. The first part concerns Nagel's account of subjectivity. Nagel's discussion of the subjectivity of experience in his paper "What is it like to be a bat?" has become classic and is virtually always taken as a point of departure in contemporary discussions of this topic. Accordingly, it is indispensable to begin with Nagel's conception of the subjectivity of experience, which I will do in the next section, 1.1. From this classical text, I will try to extract the subjective-making property of experience in the first subsection 1.1.1. In section 1.1.2 I will follow up on this discussion by considering various interpretations of the concept 'point of view' and in this subsection I will also discuss how a point of view relates to 'knowing what it is like', a famous phrase in this context.

The second part of this chapter concerns other accounts of subjectivity. This section, 1.2, is in turn divided into three subsections. In the first subsection, 1.2.1, we will add three more definitions of subjective-making properties, which can be found in the literature, to our inventory. In section 1.2.2, we will compare and contrast the five subjective-making properties that we will have found with the twelve subjective-making properties that De Sousa distinguishes in an attempt quite similar to mine. Finally, in 1.2.3, I will show how other accounts of subjectivity in the literature fit my analysis.

The third part of this chapter does not concern the concept of subjectivity so much as its application. Two questions are asked in this section, 1.3. First, does experience have these subjective-making properties that we have found? Nagel claims that experience is subjective in these ways and in section 1.3.1 we will prove him right or wrong. Second, do other mental phenomena also have these subjective-making properties? I will discuss this question in section 1.3.2.

Then, in section 1.4, I will draw conclusions and summarize this chapter.

## 1.1 NAGEL'S ACCOUNT OF SUBJECTIVITY

In this section I will present Nagel's account of subjectivity. I will do so by first, in section 1.1.1, discussing characterizations of subjectivity that we can find in Nagel's work and then, in section 1.1.2, discussing the notions 'point of view' and 'knowing what it is like' that occur in his account of subjectivity in more detail.

## 1.1.1 Nagel on the Subjectivity of Experience

In this section I will discuss Nagel's paper "What is it like to be a bat?" in search of characterizations of the subjectivity of experience in order to find out what Nagel thinks it means to say that experience is subjective. At this point I do not wish to discuss Nagel's argument against physicalism<sup>9</sup> – for now my aim is solely to get clear on what Nagel means when he uses the term 'subjective'.

Nagel first uses the term 'subjective' in the following passage:

Fundamentally an organism has conscious mental states if and only if there is something it is like to be that organism – something it is like for the organism. We may call this the subjective character of experience.<sup>10</sup>

First of all, I take 'subjective character' of experience to refer to that property (or those properties) in virtue of which experience is subjective. So, experience has a certain property – let us call it a subjective-making property. Of what is this subjective-making property predicated? What Nagel calls the 'subjective character of experience' is a property of what Nagel calls 'conscious mental states'. Although, in this passage, Nagel speaks of conscious mental states as having subjective character, elsewhere in the paper he predicates this property of 'conscious mental phenomena', 'conscious experience', 'consciousness' and 'experience'. Obviously, these terms are all closely related and Nagel seems to use them interchangeably and indiscriminately. For our purposes, we will consider them to be equivalent, as is virtually always done in the literature. For simplicity, I will use the term 'experience' in what follows to indicate whatever is referred to by the terms mentioned above. For now I will not go into the issue of what experience exactly is, i.e. whether experience is a relation, an event, a property, etc. At this point it does not make a difference for our study of the subjectivity of experience in which ontological category experience falls.<sup>11</sup>

Now what is the subjective-making property, according to Nagel? It is the property of being such that there is something it is like for an organism to be that organism. In order to get more grip on this somewhat obscure description of the subjective-making property, it will be helpful to mention one of Nagel's examples.

<sup>9</sup> For a discussion of Nagel's argument see Chapter 5.

<sup>10</sup> Nagel 1974: 436.

<sup>11</sup> This issue is taken up in Chapter 2.

Nagel's primary example involves that (we think that) there is something it is like to be a bat. We know that most bats perceive the world by sonar, but we have no idea what it is like to perceive the world by sonar. As Nagel puts it:

But bat sonar, though clearly a form of perception, is not similar in its operation to any sense that we possess, and there is no reason to suppose that it is subjectively like anything we can experience or imagine.<sup>12</sup>

This creates a problem for the notion that there is something it is like to be a bat, since how can we understand this notion if we cannot experience or even imagine what it is like to be a bat? And, Nagel adds, even if we *could* imagine what it would be like to be a bat, e.g. to navigate the world by 'a system of reflected high-frequency sound signals' as bats supposedly do, still this would only tell us what it would be like for *us* to be a bat (in this respect), not what it is like for a *bat* to be a bat. Again in Nagel's terms:

To the extent that I could look and behave like a wasp or a bat without changing my fundamental structure, my experiences would not be anything like the experiences of those animals.<sup>13</sup>

What Nagel seems to be saying, then, is (at least) that there is something it is like for an organism to have the experiences it has.

So, if Nagel is using the 'subjective character of experience' to pick out that property in virtue of which experience is subjective, then the passage cited above implies that that property is nothing other than (i.e. is identical to) the property that there is something it is like to have an experience. More formally, we can formulate what appears to be Nagel's first definition of what it means for experience to be subjective as follows: Experience E is subjective iff there is something it is like for S to have E. So, for our inventory, the first definition of the subjectivity of experience is:

(S1) E is subjective=df. For all subjects S, if S has E, then there is something it is like for S to have E.

Although in this section I am focusing on Nagel's work and his definitions of subjectivity, which are put in terms of experience, I am not assuming here that experience actually is subjective in this way. Nagel claims that it is, but I

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<sup>12</sup> Nagel 1974: 438.

<sup>13</sup> Ibid.: 439.

will only later on in this chapter discuss the question whether experience or anything else is actually subjective in this way.<sup>14</sup>

Back to the first definition. What does it mean to say that there is something it is like for an organism to have an experience? It's difficult to say more about this aspect of experience, except for contrasting it with other aspects of experience, such as the object of experience (if there is one) and the content of experience (if there is any). To illustrate the differences between these aspects of experience, let us take a particular example; suppose that I am having an experience of seeing a red flower. The object of my experience (if there is one) is the flower itself, a material object. The propositional content of the experience (again, if there is any) is the way in which I represent the flower as being, e.g., as being red, as being flower-shaped, etc. Both of these aspects of experience can be distinguished from *what it is like* to see the red flower. This is the quale of the experience, or the 'phenomenal character' of the experience, which is how I will refer to this aspect of experience in what follows. Given this, we can formulate an equivalent of the first definition as follows: Experience E is subjective iff E has some phenomenal character C for S.

Nagel spends the rest of his paper filling in and spelling out the notion 'for S' that occurs in (S1) further. The first thing he immediately goes on to say to clarify the phrase 'for S' is that 'every subjective phenomenon is essentially connected with a *single point of view*'.

In this sentence, Nagel's 'subjective phenomenon' refers to the phenomenal character of experience (i.e. what Nagel has termed the 'subjective character' of experience). This is clear from numerous passages of which the following are two examples:

Whatever may be the status of facts about what it is like to be a human being, or a bat, or a Martian, these appear to be facts that embody a particular point of view.<sup>15</sup>

Even to form the *conception* of what it is like to be a bat (and a fortiori to know what it is like to be a bat) one must take up the bat's point of view.<sup>16</sup>

In both of these passages, Nagel makes it clear that 'what it is like' to be some creature, what we have called the 'phenomenal character' of experience,

<sup>14</sup> This might sound confusing, since we have just given a definition of the subjectivity of experience. However, we can define a term without there being anything the definition applies to. I will address and explain this point in more detail at the beginning of section 1.3.1.

<sup>15</sup> Nagel 1974: 441.

<sup>16</sup> Ibid.: 442, note 8.

is essentially connected to a particular point of view. Thus Nagel seems to suggest that it is in virtue of having phenomenal character, which has the further property of being essentially connected to a single point of view, that experience is said to be subjective. In what follows however, I will talk about ‘experience’ being essentially connected to a single point of view because, even if it is the case that, strictly speaking, phenomenal character is connected to a single point of view, nevertheless, in such a case, it follows that experience is connected to a single point of view as well.

Now, Nagel devotes the bulk of the paper to discussing the property of ‘being essentially connected with a *single point of view*’.<sup>17</sup> This seems to suggest that Nagel thinks that it is *this* property, namely ‘being essentially connected with a single point of view’, in virtue of which experience is subjective. This suggests an alternative definition of what it means for experience to be subjective:

- (S2) E is subjective =df. E is essentially connected to a single point of view.

As we have seen, (S1) expresses the idea that the fact that experience is subjective just means that experience has phenomenal character, which in turn means that there is something it is like to have a particular experience. However, according to (S2), experience being subjective means that experience is essentially connected to a single point of view. To put this distinction slightly differently, according to (S1), what it means for experience to be subjective is that experience has phenomenal character. According to (S2) however, what it means for experience to be subjective is that the phenomenal character of the experience has the further property of being essentially connected to a single point of view. Now, it’s possible to hold that phenomenal character itself must be analyzed in terms of a single point of view, but as we will see in the next section, this is not what Nagel thinks. So we can conclude that Nagel seems to be of two minds: Nagel’s use of the term ‘subjective’ in his phrase ‘the subjective character of experience’ might seem to imply that (S1) is indeed what he has in mind as a definition of what it means for experience to be subjective. Yet, Nagel’s examples and the largest part of the paper all have (S2) as their main focus. It is interesting to note, in anticipation of section 1.2, that other philosophers in the debate show the same ambivalence as Nagel – most often after Nagel.

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<sup>17</sup> Cf. Nagel: 437.

Now, what does it mean for the phenomenal character of experience to be essentially connected to a single point of view? Well, this means that it is only possible for experience to have phenomenal character iff it is connected to a single point of view. It also means that experience could not lack phenomenal character exactly because it is essentially connected to a single point of view.

We have thus been able to extract two subjective-making properties from Nagel's classical text about the subjectivity of experience. The second subjective-making property of experience is 'being essentially connected to a single point of view'. We could classify this subjective-making property as an ontological property. I will understand an ontological property to be the kind of property that either specifies an ontological category or that mentions a relation that obtains between entities. The property of 'being essentially connected to a single point of view' is an example of an ontological property. This is important to note since there is a lot of confusion surrounding the term 'subjectivity' and part of the confusion is constituted by the fact that it is not clear whether subjectivity is an ontological or an epistemological notion.

Now, experience's subjective-making property of 'being essentially connected to a single point of view' raises a number of questions. First of all, what is a point of view? And, second, who can take up the same point of view? In the next section I will address these questions. I will consider, generally, how we should understand a point of view and I will discuss various interpretations of who can take up the same point of view, most of them based on Nagel (though not all endorsed by him). This discussion will hopefully yield a better and more specific understanding of definition (S2).

### 1.1.2 Point of View and Knowing What It Is Like

From Nagel's paper we have been able to extract, among more, the property of 'being essentially connected to a single point of view' as a subjective-making property. We know what it means for something to be essentially connected to something else, but what is 'a single point of view' to which experience is so connected? What does Nagel mean by 'a single point of view'?

To start, we need to determine whether Nagel understands a single point of view to be that of an individual (a token point of view) or of a certain kind of individual (a type point of view), for example a species of organism. Although the phrase 'single point of view' might seem to suggest the former, Nagel insists that he means the latter:

I am not adverting here to the alleged privacy of experience to its possessor. The point of view in question is not one accessible only to a single individual. Rather it is a *type*.<sup>18</sup>

And later:

It is often possible to take up a point of view other than one's own, so the comprehension of such facts is not limited to one's own case.<sup>19</sup>

So, in short, Nagel thinks that the phenomenal character of an experience is essentially connected to a type point of view, not a token point of view. That means: the point of view Nagel is interested in is not a point of view that only one individual can take up; rather it is a point of view that more than one individual can take up. But which individuals are able to take up the same point of view? Given Nagel's examples of bats, humans and Martians, one might think that he means that individuals of the same species can take up the same point of view. That is, on this simple reading, Nagel thinks that:

(PV<sub>1</sub>) 'A single point of view' is the point of view of *individuals of a species S*.

However, this can't be right, because there seems to be no reason to think that individuals of very similar species – for example, individuals of closely related species of birds or even human beings and higher level primates – cannot have experiences with the same phenomenal character and so know what it is like for individuals of the other (closely similar) species to have experiences with that phenomenal character.<sup>20</sup> Thus, this taken into account, Nagel might mean:

(PV<sub>2</sub>) 'A single point of view' is the point of view of *individuals of sufficiently similar species*.

However, there is another problem. In addition to being too narrow, the original formulation (PV<sub>1</sub>) is also too broad, and so is the revised formulation (PV<sub>2</sub>). It seems that, even within a species, as Nagel admits, certain individuals

<sup>18</sup> Nagel 1974: 441.

<sup>19</sup> Ibid.: 441-442.

<sup>20</sup> Another problem is that species aren't rigorously individuated, but I cannot go into this problem further here.



cannot know what it is like for other individuals of the same species to have some experience. Nagel's example involves persons blind and deaf from birth. As he writes:

The subjective character of the experience of a person deaf and blind from birth is not accessible to me, for example, nor presumably is mine to him.<sup>21</sup>

No doubt there are other examples, but the point is clear. It is not enough to be members of the same or even sufficiently similar species, but individuals have to be sufficiently similar to each other in order to share knowledge of what it is like to have certain experiences. With this in mind, Nagel's claim may be modified as follows:

(PV<sub>3</sub>) 'A single point of view' is the point of view of *individuals that are sufficiently similar*.

When are two individuals sufficiently similar? In light of Nagel's claim that a person blind from birth is not sufficiently similar to a person who can see, it seems reasonable to infer that he thinks that two individuals are sufficiently similar just in case they are able to have experiences with the same type of phenomenal character; i.e., the reason why a person blind from birth is not sufficiently similar to a person who can see, is that the blind person cannot have certain visual experiences with their distinctive phenomenal character that the seeing person can have – and vice versa. No doubt there are experiences with phenomenal character that blind persons share, which are not accessible to people who can see, such as, for example, experiences with incredible auditive phenomenal character. If this is what Nagel means, then (PV<sub>3</sub>) can be modified as:

(PV<sub>4</sub>) 'A single point of view' is the point of view of individuals who are able to have experiences with the same phenomenal character C.

(PV<sub>4</sub>) seems to be Nagel's considered account of which individuals can take up the same point of view to which phenomenal character is essentially connected. However, further improvements are called for.

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<sup>21</sup> Nagel 1974: 440.

First, although being able to have experiences with the same type of phenomenal character is *necessary* for two individuals to be sufficiently similar in the relevant sense, it is not *sufficient*. For example, it seems reasonable to suppose that, even though I am able to have the experience of tasting vegemite, I don't know what it is like to taste vegemite or what it is like for someone else to taste vegemite. I don't know what it is like for anyone to taste vegemite because I have never tasted it. In other words, a necessary condition for two individuals being sufficiently similar in the relevant sense is that they have actually had an experience with the relevant phenomenal character. Thus, we should modify (PV<sub>4</sub>) as follows:

(PV<sub>5</sub>) 'A single point of view' is the point of view of individuals who have had an experience with phenomenal character C.

But as it stands, (PV<sub>5</sub>) still isn't quite right because there is one final problem, made famous by Hume, also called 'the missing shade of blue'. The point is easy to put. Suppose I have actually seen many shades of blue, including the specific shades of blue 20 and blue 22, but I haven't seen blue 21. It seems unreasonable to think that I couldn't know what it is like to see blue 21 just because I haven't seen it. Rather, it seems likely that I can know what it is like to see the shade of blue 21 by inference from my experiences of blue 20 and blue 22 (and their phenomenal character). Therefore, (PV<sub>5</sub>) should become:

(PV<sub>6</sub>) 'A single point of view' is the point of view of individuals who have had an experience with phenomenal character C or phenomenal character sufficiently similar to C.

What it means for two experiences to have sufficiently similar phenomenal character can be specified more. I hope, however, that it is clear enough what it means for our purposes.

Now that we have considered these various interpretations of the concept of 'point of view', a new question rises. We know now which individuals are able to have or take up one and the same point of view (at least, according to Nagel). But what does it mean exactly to take up or have the same point of view regarding a certain experience with phenomenal character? The best way of finding this out is to see what it entails and what it presupposes. As we have seen, for two persons to take up the same point of view presupposes that both persons have had a very similar experience. But what does it entail to share a point of view? This is where Nagel's famous phrase of 'knowing what it is

like' comes in. If two persons are able to take up the same point of view, this entails that they both know what it is like to have that experience with that phenomenal character, which forms the basis of their shared point of view. So, for example, if two persons both have had a certain kind of headache with a certain kind of phenomenal character (say, a sharp pain on the side of the head), then they can take up the point of view that is based on sharing this experience. The fact that these persons are able to take up the same point of view entails that they both know what it is like for the other person to have the kind of headache in question. The idea, expressed in (PV6), is that someone who has not had an experience with sufficiently similar phenomenal character, for example, a third person who has only experienced a very different kind of pain (or maybe no pain at all, if a different kind of pain would already be sufficiently similar to this particular pain), could not know what it is like to have the experience and the phenomenal character in question.

The question arises whether the term 'point of view' is not superfluous. Again, we know the conditions under which people are able to take up the same point of view. The main condition that should be satisfied in order for people to be able to take up the same point of view is that they should have had an experience with the same phenomenal character. We also know what taking up the same point of view entails. When two people take up the same point of view, this entails that they know what it is like for the other person to have an experience that has the same phenomenal character. The question is whether there is more to a 'point of view' than this condition and this implication. Or can we say that a 'point of view' just is a more vague term for this condition and this implication? That is to say, is there anything over and above 'knowing what it is like' to a point of view? I would not know what this would be. 'Point of view' is a vague term, after all, that can only have literal meaning in a perceptual context. When used in an epistemological context like this one, it cannot be but a metaphor. This metaphor helps us visualize and grasp the idea that is expressed, but should be discarded when we aim to analyze the phenomenon more clearly.

Now, (PV6) suggests that one can only know what it is like to have a certain experience if one has had that experience (or one with sufficiently similar phenomenal character). But is this true? Here is one reason to think that this is true. If the sort of knowledge that is involved in 'knowing what it is like' is knowledge by acquaintance, then it follows that someone knows what it is like to have an experience with phenomenal character C when that person has had an experience with phenomenal character C. So this seems to suggest that knowing what it is like to have a certain experience follows from having (had) the experience. This does not necessarily exclude the possibility

that someone who has not had a certain experience is unable to know what it is like to have that kind of experience. But, Nagel argues that we can only know what it is like to have an experience when we have had an experience with sufficiently similar phenomenal character.<sup>22</sup>

Now that we know better what a point of view is and who can take up the same point of view, we can understand definition (S2) better: i.e. we can understand one specific interpretation of (S2) better. According to (S2), what it means for experience to be subjective is that it is essentially connected to a single point of view. This description can clearly be interpreted in many different ways, but if we spell out the concept 'point of view' as we have in (PV6), we have one specific interpretation of what it means for experience to be subjective in the sense of (S2). This is what (S2) looks like if you accept (PV6) as an interpretation of the concept 'point of view':

- (S2') E is subjective=df. For all subjects S, S knows what it is like to have E only if S has had an experience E\*which either has the same phenomenal character as E or phenomenal character sufficiently similar to the phenomenal character of E.

In what follows, I will mainly use the original formulation of this definition, (S2), and only sometimes will I use the more specific interpretation (S2'). To avoid any confusion I will always indicate whether I am using or referring to (S2) or (S2').

## 1.2 OTHER ACCOUNTS OF SUBJECTIVITY

The second part of this chapter concerns other accounts of subjectivity that can be found in the literature. In section 1.2.1, I will discuss three more definitions of the subjectivity of experience. The first two follow from our discussion of (PV1)-(PV6) in the previous section. The third definition stems from a paper from Kekes, in which he presents an account of subjectivity that is close to Nagel's, yet slightly different. We will then have distinguished five subjective-making properties overall. In the next section, 1.2.2, we will compare and contrast these five subjective-making properties with the twelve subjective-making properties that De Sousa describes in his paper which attempts to analyze the notion of subjectivity very much in the same way as I do in this chapter. I will show that many of our definitions map onto one

<sup>22</sup> I will discuss a similar point later when we talk about (S4).

another and that some of De Sousa's definitions can be reduced to some of the others. In the last section of this chapter, 1.2.3, I will show how other accounts in the literature fit the five subjective-making properties that I have distinguished very well.

### 1.2.1 More Definitions of Subjectivity

In this section I will distinguish three more definitions of subjectivity. The first two follow from our discussion of (PV1)-(PV6) in the previous section; the third can be found in a paper by Kekes.

A question that is raised by our discussion in the previous section is why one can only know what it is like to have an experience if one has had an experience with the same phenomenal character. It seems we must say that you know what it is like to have a certain experience because you remember what it was like to have that kind of experience in the past and, as it were, access your own past experience and its phenomenal character. I know what it is like for you to have a headache because I remember having a similar headache a few months ago and I remember how it felt. This seems to suggest that when you know what it is like to have a certain experience, you do so by accessing your own past experience which was (sufficiently) similar. After all, what else are you accessing? No one can access someone else's experience. Even if you can know what it is like for someone else to have a certain experience, there is still a way in which you don't have access: a particular token experience and a particular token phenomenal character can only be had and accessed by one person. I can know what your headache feels like because I have had headaches in the past, but I cannot access your headache; I cannot literally feel your pain. This suggests a further way in which experience can be said to be subjective, which can be expressed by the following possible definition of the subjectivity of experience:

(S3) E is subjective =df. E is private.

Note that we are talking about token experiences and token phenomenal character in this possible definition. Since it might not be clear what it means for experience to be private, here is a paraphrase of definition (S3) which spells out exactly what that means:

(S3') E is subjective =df. For all subjects S, if S has E, then only S has E.

I will stick to the formulation (S<sub>3</sub>), but (S<sub>3</sub>) and (S<sub>3</sub>') are equivalent. I will further consider whether experience is actually subjective in this way in section 1.3.1.

The discussion leading up to (S<sub>3</sub>) suggests another interesting point. It suggests that the point of view that we have been talking about is a 'first person point of view'. After all, it seems that persons who are able to take up the same point of view in fact are, as it were, 'accessing their own past experience'. They know a certain experience from their first person point of view on their own past experiences. Moreover, no one without such a first person point of view can know the experience in question. This suggests yet another way in which experience can be said to be subjective:

- (S<sub>4</sub>) E is subjective =df. E can only be known from a first person point of view.

Since the term 'first person point of view' might cause confusion, here is the definition with the term 'first person point of view' unpacked:

- (S<sub>4</sub>') E is subjective =df. For all subjects S, S knows E only if S has (had) E.

(S<sub>4</sub>') looks very similar to (S<sub>2</sub>'), but I think we should distinguish them nevertheless. The first reason to distinguish them is that (S<sub>2</sub>) and (S<sub>4</sub>), the definitions that they are respectively derived from, are different from one another and (S<sub>2</sub>') and (S<sub>4</sub>') are not the only interpretations of (S<sub>2</sub>) and (S<sub>4</sub>). The second reason to distinguish them is that philosophers talk (and have talked) about experience in both ways. Even if one wants to argue that they are the same property, and even if they would turn out to be the same property, it is not obvious here and now that they are identical. In order for our account of the subjectivity of experience to be as comprehensive as possible I think we should discuss both (S<sub>2</sub>') and (S<sub>4</sub>'). A third reason to distinguish (S<sub>2</sub>') and (S<sub>4</sub>') is that there does seem to be a difference between them: according to (S<sub>2</sub>') one can only know what it is like to have an experience if one has had the experience (or an experience with sufficiently similar phenomenal character), whereas (S<sub>4</sub>') does not concern knowledge of phenomenal character but knowledge of experience.

Definition (S<sub>4</sub>) is also quite similar to definition (S<sub>3</sub>), according to (S<sub>4</sub>) an experience can only be known from a first person point of view and, according to (S<sub>3</sub>), experience is private. Don't these two descriptions mean the same thing? I think there are, again, good reasons to distinguish these

definitions. Definition (S<sub>3</sub>) is an ontological definition: it is about *having* a token experience, whereas definition (S<sub>4</sub>) is an epistemic definition: it is about *knowing* an experience. One can argue that, despite this theoretical difference, they always go together in real life: as soon as you have an experience, you know the experience and vice versa. However, even if it would be the case that in real life the one is not instantiated without the other, this does not mean that (S<sub>3</sub>) and (S<sub>4</sub>) mean the same thing. Their reference or extension might be identical, but their sense does not need to be.

For these reasons, I will not reduce (S<sub>4</sub>) to either (S<sub>2</sub>') or to (S<sub>3</sub>). I will consider whether experience is actually subjective in the way (S<sub>4</sub>) specifies in section 1.3.

Before moving on, a more general remark that should be made about the possible definitions that we have encountered so far is the following. It seems that there is a general difference between definitions (S<sub>1</sub>) on the one hand and (S<sub>2</sub>), (S<sub>3</sub>) and (S<sub>4</sub>) on the other. Whereas (S<sub>1</sub>) is a definition of the subjectivity of experience where the term 'experience' is used to refer to a type, definitions (S<sub>2</sub>), (S<sub>3</sub>) and (S<sub>4</sub>) are definitions of experience in which the term 'experience' refers to a token experience.

In the remainder of this section I will discuss one paper in the literature that presents an account of subjectivity that is similar to Nagel's, yet not identical. From this account we can infer one more definition of a subjectivemaking property of experience. It should be noted that I am not presently concerned with the argument and thesis of the paper discussed in this section, nor will I consider in this section whether experience actually is subjective in any of the senses here defined. In this section, I am solely interested in inventorying possible definitions of the subjectivity of experience and I only discuss Kekes' paper in this section because it offers an alternative definition of the subjectivity of experience. The other papers in the debate offer definitions that are identical to the definitions we have already found or that can be reduced to these.

The additional definition of subjectivity worth discussing is from Kekes' paper "Physicalism and Subjectivity". In this paper, Kekes defends that the key to understanding what the subjectivity of experience is, is to compare a zombie case of 'pain' with a normal experience of pain. In the zombie case, a subject is presented with the usual physiological correlates of pain (by a future scientist who is in control of manipulating the subject's brain), but when asked, the subject denies having any feelings of pain, or rather, the subject would be puzzled just by the notion of pain. In a normal case, of course, a subject in a physiological state of pain would report having feelings of pain. Now

according to Kekes, this tells us the following about the subjective character of experience:

The subjective quality is just this feeling, which, if it was absent would mean that no experience has occurred. Subjectivity is thus an essential component of experience. There could no more be an experience without a subjective component than there could be a human being without a body.<sup>23</sup>

According to this passage, Kekes seems to think that subjectivity is a necessary property of experience. Kekes identifies the subjective property of experience with 'this feeling, which if it was absent would mean that no experience has occurred'. Now, which feeling could this refer to? One obvious option is that 'this feeling' refers to the phenomenal character of the experience. After all, phenomenal character (or what it is like to have a certain experience) could be described as 'a feeling', and it is exactly this which is present in a normal case of pain and is absent in a zombie case of 'pain'. For a zombie, there is nothing it is like to be in such a physiological state that, if a normal human being would be in that state, the human being would be in pain. For a normal human being to be in a physiological state of pain comes with feelings of pain, i.e. particular 'painful' phenomenal character. Here Kekes seems to be saying, then, that the subjective property of experience is identical to the phenomenal character of experience (and that phenomenal character is a necessary property of experience). This is the same as Nagel's definition (S1), which reads: 'E is subjective =df. For all subjects S, if S has E, then there is something it is like for S to have E.'

However, Kekes makes one other remark about what the subjectivity of experience is:

What more is the subjective component [of experience] than the having of the experience?<sup>24</sup>

In this second passage, Kekes seems to be saying that the subjective property of an experience is nothing more than 'having the experience'. This is a confusing thesis for the following reason. If Kekes' two passages should be consistent, Kekes must be saying that subjectivity is a necessary property of experience and that this (subjective) property is identical to 'having the experience'. It is, however, unclear if 'having the experience' is a property of the experience, or of the person who has the experience, or if it is an event, or a relation (or yet

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<sup>23</sup> Kekes 1997: 533.

<sup>24</sup> Ibid.: 535.



something different). But, setting this issue aside, we can say, then, that ‘having the experience’ is *that* property in virtue of which experience is subjective, i.e. the subjective-making property. How could ‘having the experience’ be the property in virtue of which experience is subjective? One explanation would be that if the experience in question is to be had, it has to be the case that it is had by someone, i.e. by a particular subject. The fact that the experience is had specifies a way in which the experience is tied to a subject. In this sense, ‘having the experience’ can thus be said to make experience ‘subjective’. Thus, this second passage suggests the following definition of the subjectivity of experience:

(S<sub>5</sub>) E is subjective=df. There is some subject S which has E.

Since it is a necessary condition for anything to be an experience that it is the experience of a particular subject, this means that, according to this definition, experience is necessarily subjective.

This section has thus led us to infer three more definitions of subjective-making properties, bringing the total to five. In section 1.1.1, we had already found two definitions of the subjectivity of experience. The first definition, (S<sub>1</sub>), expresses the idea that the subjective-making property of experience is the phenomenal character of experience. The second definition, (S<sub>2</sub>), which I think most accurately reflects Nagel’s own account, departs from this idea and claims that the subjective-making property of experience is the property of being essentially connected to a single point of view. In this section, we found three more definitions of the subjectivity of experience. The third definition, (S<sub>3</sub>), expresses the idea that the subjective-making property of experience is that only one person can have and access a given token experience and its phenomenal character. According to the related definition, (S<sub>4</sub>), the subjective-making property of experience is that experience can only be truly known from a first person point of view. According to the fifth definition, (S<sub>5</sub>), the subjective-making property of experience is that experience is had by a subject.

At this point one might wonder what the logical relations between these definitions of the subjectivity of experience are: if experience is subjective in one way, is that sufficient for experience being subjective in another way? From the formal form of the definitions, it is easy to infer which logical relations obtain between them. There are only three formal relations that obtain between some of these definitions, viz. (S<sub>1</sub>), (S<sub>3</sub>) and (S<sub>4</sub>) each are sufficient for (S<sub>5</sub>). This means that if experience is subjective in the senses of either (S<sub>1</sub>), (S<sub>3</sub>), or (S<sub>4</sub>), it is also subjective in the sense of (S<sub>5</sub>). This also means that definition (S<sub>5</sub>) is necessary for definitions (S<sub>1</sub>), (S<sub>3</sub>) and (S<sub>4</sub>). There may be other kinds of connections (e.g. metaphysical ones) between the

different definitions, but the connections just mentioned are the only logical connections that obtain.

In section 1.3.1, I will consider whether experience and other mental phenomena are actually subjective in these ways.

### 1.2.2 Mapping onto De Sousa

In our aim to establish what it means for something to be subjective, we have distinguished five definitions of subjective-making properties. In his paper called “Twelve Varieties of Subjectivity: Dividing in Hopes of Conquest”,<sup>25</sup> De Sousa undertakes a task very similar to mine, namely to analyze the notion of subjectivity. In his quest, De Sousa has found no less than twelve subjective-making properties. This raises a number of interesting questions, viz.: which subjective-making properties does De Sousa distinguish? And how come he finds twelve where we found five? Are there more subjective-making properties than we thought, or is there another reason for this difference?

Starting with the last questions, there is an obvious reason why De Sousa is able to distinguish twelve interpretations of subjectivity even though we only found five. The reason is that De Sousa analyzes the notion of subjectivity *per se*, not within a specific philosophy of mind context as we have done. As I mentioned in the introduction to this chapter, the term ‘subjectivity’ is not just used in the philosophy of mind, but also in other areas of philosophy and in non-philosophical contexts such as daily life. Some of the interpretations of subjectivity that De Sousa offers clearly concern subjectivity within the philosophy of mind, namely subjectivity of the mental or subjectivity of consciousness. But, as we will see, some of his interpretations concern subjectivity as it is understood in different areas of philosophy or outside of philosophy. Despite this, De Sousa’s paper is still very interesting for us to look at closely, since we want to make sure we found all the definitions of subjectivity that are relevant for our purposes. Also, it is interesting to see which of his definitions map onto the ones that we have found and in which ways the term ‘subjectivity’ is understood outside the philosophy of mind. For these reasons, I will discuss all twelve interpretations of subjectivity that De Sousa offers.

Here are De Sousa’s twelve interpretations of subjectivity:

1. Perspective.
2. Agency.
3. Titularity or ownness.

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<sup>25</sup> De Sousa 2002.

4. Privileged access.
5. The incorrigibility of appearance.
6. Proprioceptive sense.
7. Ipseity.
8. Tone or color.
9. The subjectivity in intersubjectivity.
10. Projection.
11. Seeing-as.
12. Phenomenal experience.<sup>26</sup>

Not all of these descriptions of subjectivity are illuminating at first glance. In the following I will go through this list and see for each interpretation of subjectivity whether it maps onto one of the definitions that we have found and, if it does not, why it does not and whether we should add it to our inventory or not.

De Sousa's first interpretation of subjectivity, according to which subjectivity means that individuals have a point of view and that their mental states are perspectival, is one which we have already encountered in the work of Nagel. We introduced a definition for this interpretation of subjectivity earlier, namely (S<sub>2</sub>). De Sousa's first interpretation of subjectivity thus maps onto one of the definitions that we found.

De Sousa's second interpretation of subjectivity concerns the 'subjectivity of agency', which De Sousa defines as 'freedom of the will'. This is a topic that lies beyond the scope of our project. If freedom of the will implies a certain subjectivity of agency, then this is a different kind of subjectivity than the kind that we have been talking about, namely the subjectivity of experience, or of the mental. This interpretation thus does not map onto one of our definitions of subjectivity, but I do not think we need to add it to our inventory either, since it does not concern the subjectivity of the mental and is not relevant within the context of the philosophy of mind. This interpretation of subjectivity is important in metaphysics and ethics instead.

The third interpretation of subjectivity that De Sousa discusses, namely the one of 'titularity or ownness', is relevant in the philosophy of mind and to our project. What does 'titularity or ownness' mean? De Sousa clarifies as follows:

Sergio Moravia (1995) has labeled "titularity" the fact that my mental attributes (including but not only including qualia) are my own in a unique sense of ownership.<sup>27</sup>

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<sup>26</sup> Ibid.

<sup>27</sup> Ibid.

For this reason, De Sousa also calls this form of subjectivity ‘special ownership’. The ownership of our mental states is special in two ways:

One is that every mental state necessarily belongs to someone or other; and the second is that every mental state necessarily belongs to whoever it belongs to and not anyone else.<sup>28</sup>

We have encountered and distinguished the first kind of ownership, viz. that for every mental state there is a subject that has that mental state as well and captured the idea in definition (S<sub>5</sub>). The second kind of ownership that is expressed is also a form of subjectivity that we have encountered, namely that a particular token mental state can only be had by one subject and not by anyone else. We have expressed this sense in which experience is subjective in definition (S<sub>3</sub>). This interpretation of subjectivity thus maps onto our definitions very well.

The fourth interpretation of subjectivity that De Sousa distinguishes is very closely related to the third one; it is the interpretation of subjectivity as privileged access, which we have encountered as well in definition (S<sub>4</sub>). This interpretation of subjectivity thus also maps onto one of ours.

Number five on De Sousa’s list is the ‘in corrigibility of appearance’. The idea that how things appear or seem to us is incorrigible is an interesting idea in its own right. However, hardly any philosophers these days think that our appearances are incorrigible, and, moreover, the (supposed) incorrigibility of appearance falls beyond the scope of this project, since it is an issue in the philosophy of perception (which is indeed part of the philosophy of mind, but a different part). So, even though it does not map onto one of our definitions, I do not think that we need to add it to our inventory since it concerns an issue in the philosophy of perception, which is not directly relevant to our project.

The sixth interpretation of subjectivity is ‘proprioceptive sense’, which is the sense by which we can directly know where our body parts are without having to look at our body or infer or reason about it. For example, I just know where my left foot is right now (without having to look down or think about it). This is an interesting phenomenon, but it is not the kind of subjectivity with which we are here concerned. If this is a form of subjectivity, I think it is so only in virtue of De Sousa’s third interpretation, namely the one of ‘ownness’. Proprioceptive sense is special in the sense that only I can have this kind of sense of my own body; anyone else wanting to know where my left

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<sup>28</sup> Ibid.

foot is would have to look around for it. Similarly, you are the only one who can know where your left foot is without looking for it or thinking about it. We are each in a unique epistemic position when it comes to the location of our body parts because our body parts are ours and ours only. Proprioceptive sense thus depends for its subjectivity on the following other interpretations of subjectivity: perspective, ownness and privileged access, or according to our scheme: (S<sub>2</sub>), (S<sub>5</sub>) and (S<sub>4</sub>).

De Sousa's seventh interpretation of subjectivity is 'ipseity', which is the idea that when we refer to ourselves, we don't just refer to the person who happens to be us, but we refer to *ourselves*. That is to say: when we refer to ourselves we do not refer to ourselves under a third person description such as our name, but we refer to ourselves under a first person description, such as 'I'. Nagel has described this idea very well in *The View From Nowhere* and Perry (1975) has illustrated this with a pointing example.<sup>29</sup> The fact that we can refer to ourselves in this unique way is a result of the fact that we each are ourselves and stand in a unique relation to ourselves. I am the only one who can refer to myself using the word 'I' because I stand in a unique relation to myself, just like you stand in a unique relation to yourself. This kind of subjectivity thus seems to depend on the first and fourth forms of subjectivity that De Sousa described: perspective and privileged access, our (S<sub>2</sub>) and (S<sub>4</sub>).

The eighth interpretation of subjectivity is called 'tone or color' and, despite its name, does not refer to ordinary color perception. Instead, 'tone or color' should here be understood as 'one's experience of oneself' or 'my feeling-of-being-me'.<sup>30</sup> De Sousa stresses that this kind of subjectivity cannot be reduced to ipseity. However this may be, I think that this kind of subjectivity can be reduced to another kind of subjectivity that De Sousa distinguishes later (number 12), which is a definition that we have seen before, namely (S<sub>1</sub>): E is subjective=df. For all subjects S, if S has E, then there is something it is like for S to have E. As we have talked about in our discussion of Nagel, there is something it is like to have experiences, including the experience of being ourselves or having our own experiences. One of Nagel's main examples is that there is something it is like for a bat to be a bat, and that there is something it is like for us to be ourselves. I don't see a reason why 'tone or colour' couldn't be reduced to this kind of subjectivity – De Sousa's number 12 and our (S<sub>1</sub>) – and, in fact, I think it should be so reduced.

The ninth interpretation of subjectivity is 'subjectivity in intersubjectivity'.

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<sup>29</sup> See Nagel 1986; Perry 1975.

<sup>30</sup> De Sousa 2002.

The idea here is that our identity is intersubjective in a sense. This is an interesting idea, but it does not concern the subjectivity of the mental, but rather a phenomenon in social philosophy that has also been called 'social identity', which is the 'part' of our identity that has been formed under the influence of others. I don't think that we need to add this interpretation of subjectivity to our definitions for the reason that this is a kind of subjectivity that is relevant in social philosophy and maybe in daily life, but this is not the kind of subjectivity that is relevant in the philosophy of mind.

The tenth interpretation of subjectivity is 'projection' or 'projective illusion', in a Freudian sense. This is how De Sousa describes 'projection':

Now projection is actually a pathological condition, to the extent that it represents a mistake, an illusion based on a sort of confusion between a characteristic of oneself (which isn't acknowledged) and which is ascribed to others though it isn't actually there.<sup>31</sup>

According to De Sousa, this kind of projection is an instance of an interpretation of subjectivity. The best way for me to understand this is to interpret De Sousa as saying that projection is an instance of 'interpretation of reality' or 'subjective truth': the truth according to one person, which is not the truth according to anyone else (and, of course, strictly speaking no truth at all). Maybe this kind of 'interpretation of reality' is comparable to, or the same as, an opinion, with the difference that 'projection' is an opinion that is necessarily inaccurate, while opinions generally can be accurate. As I said in the introduction to this chapter, in daily life opinions are a paradigm case of something to which the term 'subjective' applies. This interpretation of subjectivity is thus a form of subjectivity which we speak about in daily life and ordinary contexts, but this is not a form of subjectivity that is relevant within the philosophy of mind. I will therefore not distinguish a separate definition for this interpretation of subjectivity.

The eleventh interpretation of subjectivity is 'seeing-as', by which De Sousa means that we often, if not always, perceive things as being such and such. There is an interesting debate in the philosophy of perception about the question whether or not all observation has conceptual content, but this debate does not concern the form of subjectivity in which we are here interested.

The twelfth and final interpretation of subjectivity that De Sousa distinguishes is phenomenal experience, which we have captured in definition (S1).

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<sup>31</sup> Ibid.

This ends our discussion of the twelve interpretations of subjectivity that De Sousa distinguishes. What can we conclude from this discussion? First, the term ‘subjectivity’ can be interpreted in many ways and not all of these interpretations of the term ‘subjectivity’ fall within the philosophy of mind or, in other words, concern the subjectivity of the mental or of experience. De Sousa’s interpretations of subjectivity include, among others, ones that are relevant in social philosophy, ethics, metaphysics, philosophy of perception, daily life, etc. Of these interpretations, we have said that they fall beyond the scope of our field or this project, which is why we haven’t formulated any new definitions for these kinds of subjectivity.

The second conclusion we can draw from this discussion is that all the interpretations of subjectivity that De Sousa distinguishes that *are* within the scope of this project, map onto our definitions of subjectivity perfectly. We do not have to add any new definitions to our inventory. Here is the schematic result of mapping onto De Sousa:

- |   |                                |
|---|--------------------------------|
| 1. Perspective.                           | (S2)                           |
| 2. Agency.                                | (not relevant)                 |
| 3. Titularity or ownness.                 | (S5)                           |
| 4. Privileged access.                     | (S4)                           |
| 5. The incorrigibility of appearance.     | (not relevant)                 |
| 6. Proprioceptive sense.                  | reduces to (S2), (S5) and (S4) |
| 7. Ipseity.                               | reduces to (S2) and (S4)       |
| 8. Tone or color.                         | reduces to (S1)                |
| 9. The subjectivity in intersubjectivity. | (not relevant)                 |
| 10. Projection.                           | (not relevant)                 |
| 11. Seeing-as.                            | (not relevant)                 |
| 12. Phenomenal experience.                | (S1)                           |

De Sousa’s first, third, fourth and twelfth interpretation of subjectivity all correspond to definitions that we have also distinguished. On top of that, his sixth, seventh and eighth interpretations can be reduced to definitions that we distinguished, which means that all the interpretations that are relevant in a philosophy of mind context are covered by the five definitions that we found earlier. As is also clear from the above schema, definition (S3) that we distinguished does not occur on De Sousa’s list. According to (S3) E is subjective =df. E is private. This might be covered either by De Sousa’s ‘ownness’ or by his ‘privileged access’.

### 1.2.3 How Other Accounts Fit (S1)-(S5)

In this section, I will show that the other accounts of subjectivity in the literature fit my schema of subjective-making properties (S1)-(S5). I will do so by discussing a number of different papers and books in the literature in which definitions or descriptions of subjectivity are offered. Since there are so many of these, the question is which ones made it in here. For obvious spatio-temporal reasons, I have limited my discussion to two sets of three or four accounts of subjectivity that can be found in the literature.

The first set consists of the accounts of subjectivity proffered by Mandik, Sturgeon, Perry and Kriegel. All four of them offer accounts of subjectivity that are inspired by Nagel's account and are very similar to it. As such this set represents the many more papers in the literature that are very similar to Nagel's. The reason to include this set is to show that Nagel's account, which we have used as a basis for gathering definitions of subjectivity, is not obscure or single-minded but an ideal and solid foundation for the analysis of this concept, as the adoption and defense of it have been shown time and time again by similar-minded papers.

The second set that I will discuss consists of three accounts of subjectivity found in the work of Searle, Georgalis and Farkas who have all three written extensively on the topic of subjectivity but in a much more independent way than the members of the previous set. Even though these accounts are more independent of Nagel's account, they all end up describing subjectivity in a fashion very similar to Nagel's (S2).

I hope that this section shows that it is justified to base the analysis of the conception of subjectivity on Nagel's account since it has influenced and convinced many, and it corresponds to the accounts of others. I will start with the first set of four: Mandik, Sturgeon, Perry and Kriegel.

In the abstract of his paper "The Neurophilosophy of Subjectivity" Mandik gives the following description of subjectivity:

Subjectivity is the alleged property of consciousness whereby one can know what it is like to have certain conscious states only if one has undergone such states oneself.<sup>32</sup>

Two things should be noted about this description of subjectivity. First, according to this definition, subjectivity is an epistemic property. After all, Mandik uses the term 'can know what it is like (to have certain conscious states)' instead of using the term 'having (certain conscious states)'. Second,

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<sup>32</sup> Mandik 2009: 602.



it should be noted that, according to this definition, subjectivity is a property of consciousness and conscious mental states. At least, that is what it seems like. However, on the same page, Mandik gives a different description of subjectivity, according to which it is not the case that subjectivity is a property of consciousness and conscious mental states:

Subjectivity is an alleged property of phenomenal character, namely, the property of being one-way knowable. More specifically, the claim that phenomenal character is subjective is the claim that the only way to know some phenomenal character is by having a conscious experience that has that character.<sup>33</sup>

According to this second description, subjectivity is a property of phenomenal character, not of consciousness. It is remarkable that Mandik uses different terms in these two descriptions of subjectivity that occur on the same page of the paper. Since he does not explain this, and since he uses the second description in the rest of his paper, I will assume he actually has this definition in mind, in which subjectivity is a property of phenomenal character. Also, as we have seen in the previous section, if it is the case that phenomenal character is subjective, and conscious mental states have phenomenal character, then conscious mental states would still be subjective in virtue of having phenomenal character. The reverse does not hold, if conscious mental states are subjective, it does not follow that phenomenal character is subjective. This is another reason to stick with Mandik's second description.

Now, what does Mandik claim exactly? Mandik claims that what it means for phenomenal character to be subjective is that 'the only way to know some phenomenal character is by having a conscious experience that has that character'. We can paraphrase this in the following way: for phenomenal character to be subjective means that 'only individuals who have had an experience of type E can know what it is like to have E.' Put in terms of types of phenomenal character rather than types of experience, this becomes 'only individuals who have had an experience can know what it is like to have an experience.' Now, this is very close to Nagel's definition (S2) in combination with the point of view that we called (PV6), so (S2'). Mandik uses the combination of the definition of subjectivity together with the description of the particular point of view as a description of subjectivity. This can be taken to mean that, even though he does not explicitly formulate them as such, Mandik agrees with Nagel's (S2'). Mandik's description of the subjectivity of experience is so

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<sup>33</sup> Ibid. Mandik adds to qualify: 'This is a first pass and will be refined further later'.

similar to definition (S2') that we have found, that we can say that it can be reduced to (S2').

Mandik indeed mentions that his description of the subjectivity of experience is based on the work of Nagel. He offers his own interpretation of Nagel's account of subjectivity:

For all types of phenomenal character, in order to know what it is like to have a conscious experience with a phenomenal character of a type, one must have, at that or some prior time, a conscious experience with a phenomenal character of the same type.<sup>34</sup>

Mandik recognizes that many philosophers, including ones supporting Nagel's argument, would reject this definition for the reason that this principle does not seem to hold for all types of phenomenal character. That is, this analysis falls prey to the 'missing shade of blue' objection (as we have discussed in section 1.1.2). This is why Mandik suggests adjusting the principle in the following manner:

For at least one type of phenomenal character, in order to know what it is like to have a conscious experience with a phenomenal character of a type, one must have, at that or some prior time, a conscious experience with a phenomenal character of a relevantly similar type.<sup>35</sup>

This definition is equivalent to our (S2'), which means that Mandik confirms our reading and interpretation of Nagel. It also confirms that, even though we cannot find this last modification in Mandik's own analysis of the subjectivity of experience, he would certainly agree with adding it, which would mean that his description would become even more similar to Nagel's. In the rest of the paper, Mandik discusses the phenomenal concept strategy to account for the subjectivity of experience thus characterized and judges it on its merits, which I will not be able to go into at this point.

Next, let's turn to "The Epistemic View of Subjectivity" from Sturgeon. In this paper Sturgeon gives a characterization of the subjectivity of experience that is very similar to (S1). He writes:

I assume that perceptions and sensations do, at least on occasion, manifest conscious subjectivity. I further assume they do so by possessing "phenomenal properties". I call such properties qualia.

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<sup>34</sup> Ibid.: 603. Note: this is Mandik's interpretation of Nagel, not Nagel's own words.

<sup>35</sup> Ibid.

Qualia are (identical to) the features that give certain perceptions and sensations their characteristic subjectivity.<sup>36</sup>

Sturgeon clearly seems to hold, then, that subjective character is identical to phenomenal character, which is expressed by (S1).

Later on, Sturgeon makes the following two claims about knowing what it is like to have an experience with certain phenomenal character:

To understand the nature of a given kind of subjective experience, one must know what it is like to have that kind of experience.<sup>37</sup>

To know what it is like to have a given kind of subjective experience, one must have had that experience.<sup>38</sup>

As we have already seen, Sturgeon does *not* think that these theses about ‘knowing what it is like’ describe a subjective-making property. Instead, he thinks that the subjective-making property of experience is identical to its phenomenal properties (or phenomenal character). Sturgeon’s two statements about ‘knowing what it is like’ should therefore be interpreted as statements indicating which persons can take up the same point of view and so which persons can know what it is like to have a particular experience. Although it is not spelled-out in as much detail, Sturgeon’s statements closely resemble (PV6). I think we can therefore say that Sturgeon’s description of subjectivity is more or less identical to (S1) and that he also agrees with (PV6).

In *Knowledge, Possibility, And Consciousness*, Perry also offers an account of subjectivity that is quite similar to Nagel’s. Here are the relevant passages:

We are feeling an intense pain. We focus on that pain and on a certain aspect of it. Not on its cause, nor on the injury it might lead to, but on what it is like to have it. This aspect of the experience is sometimes called its “subjective character”, and such aspects are sometimes called “qualia”.<sup>39</sup>

But common sense also supports what Chalmers calls the phenomenal concept of mind, it holds that some of our mental states, which I’ll call “experiences” have subjective characters in Nagel’s sense. That is, experiences are those mental states that have the property that it is like something to be in them. What it is like to be in a brain state is its subjective character.<sup>40</sup>

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<sup>36</sup> Sturgeon 1994: 221.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid.

<sup>39</sup> Perry 2001: 3.

<sup>40</sup> Ibid.: 39.

According to Perry, then, subjectivity is identical to phenomenal character or qualia, just as Sturgeon argues. Perry's interpretation of the subjectivity of experience is thus identical to (S1), which we have found in Nagel's work.

The fourth and final paper in this set is Kriegel's "Naturalizing Subjective Character". There are three relevant passages in this paper in which subjectivity is described. Here is the first relevant passage of the paper:

When I have a conscious experience of the sky, there is a bluish way it is like for me to have or undergo my experience. I suggest that we distinguish two aspects in this bluish way it is like for me: (i) the bluish aspect, which we may call the experience's qualitative character, and (ii) the *for-me* aspect, which we may call its subjective character.<sup>41</sup>

In this first passage, Kriegel describes the subjective property of experience as the 'for-me' aspect of the experience. It is not entirely clear what Kriegel means by the 'for-me' aspect of experience. It is not the phenomenal character of the experience, which would be, as Kriegel calls it, 'the experience's qualitative character'. If it isn't anything qualitative then it seems the 'for-me' aspect of experience is purely formal and can only refer to the fact that (say) I am having the experience, i.e. either to the relation the object of experience and I stand in or the relation between the phenomenal character of the experience and me. However, there are two more relevant passages. Let's take a look at the second one:

Not only is the experience bluish, but I am also aware of its being bluish. Its being bluish constitutes its qualitative character, while my awareness of it constitutes its subjective character.<sup>42</sup>

In this second passage, Kriegel describes the subjective property of experience in terms of 'my awareness of it'. 'It' in this sentence probably refers to 'the experience', although this is not entirely clear. In any case, this quotation makes one think that our interpretation of the first passage is not accurate, and all Kriegel means by the 'for-me' aspect of experience is that we *are aware of* the phenomenal, or qualitative, character of our experiences. So, Kriegel thinks that the subjective-making property of experience is identical to our awareness of the (phenomenal character of) experience. Kriegel thinks, then, that that which makes an experience a conscious experience is identical to the property which makes an experience a subjective experience. Is this in line with the third passage? Here it is:

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<sup>41</sup> Kriegel 2005: 24.

<sup>42</sup> Ibid.

The subjective character, or for-me-ness, of an experience consists, then, in the inner awareness the experience involves.<sup>43</sup>

In this third passage, Kriegel describes the subjective property of experience as 'the inner awareness the experience involves'. I take it this is supposed to express the same idea as the idea expressed in Kriegel's second passage, namely that the subjective property of experience is identical to that (property) which makes experience conscious. According to Kriegel, then, what it means for experience to be subjective is that the person having the experience is aware of it. This is how we could put it more formally: Experience E is subjective =df. S is aware of E. Now, why don't we distinguish this definition as a separate definition of the subjectivity of experience?

We don't distinguish this as a separate definition of the subjectivity of experience because it can be reduced to (S4). According to (S4), experience is subjective in the sense that only the person who has (had) an experience knows the experience. Obviously, Kriegel's account of the subjectivity of experience is not in terms of knowledge but in terms of awareness. However, these terms are closely related, if not used in the same way in this context. Imagine having a particular experience, say a headache. Once you realize you have a headache, you are aware of this experience and you know the experience. One could argue about the difference between these two cases or about their chronological or causal relations, but all in all we can say that they both concern an individual standing in an epistemological relation to his or her own experience. This common base is sufficient for not distinguishing an extra definition of the subjectivity of experience here.

This concludes the discussion of the first set of four accounts of subjectivity that are similar to Nagel's. Now I will move on to the second set of three: Searle, Georgalis and Farkas.

The first alternative account of subjectivity of this second set that should be considered is Searle's account. In *The Mystery of Consciousness* and *The Rediscovery of the Mind*, Searle has written extensively about the subjectivity of consciousness. Like Nagel, Searle is a defender of the idea that consciousness is subjective, as is clear from passages such as the following:

Conscious mental states and processes have the special feature not possessed by other natural phenomena, namely subjectivity.<sup>44</sup>

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<sup>43</sup> Ibid.: 29.

<sup>44</sup> Searle 1992: 93.

Consider, for example, the statement 'I now have a pain in my lower back.' That statement is completely objective in the sense that it is made true by the existence of an objective fact (...). However, the phenomenon itself, the actual pain, has a subjective mode of existence.<sup>45</sup>

Now, what does Searle mean by pain having a 'subjective mode of existence'? The following two passages can help us understand what Searle thinks the subjectivity of experience is:

Well, first it is essential to see that in consequence of its subjectivity, the pain is not equally accessible to any observer. Its existence, we might say, is a first-person existence. (...) Subjectivity has the further consequence that all of my conscious forms of intentionality that give me information about the world independent of myself are always from a special point of view. The world itself has no point of view, but my access to the world through my conscious states is always perspectival.<sup>46</sup>

Conscious states are qualitative in the sense that for any conscious state, such as feeling a pain or worrying about the economic situation, there is something that it qualitatively feels like to be in that state, and they are subjective in the sense that they only exist when experienced by some human or other sort of "subject".<sup>47</sup>

I will discuss the latter passage first, since the former passage speaks of 'consequences' of subjectivity, which might not be descriptions of subjectivity itself. In the latter passage, Searle distinguishes between consciousness states (which can also be called 'mental states' or 'experiences') being 'qualitative' on the one hand and 'subjective' on the other hand. Searle's description of a mental state being 'qualitative' is that there is something it is like to be in that state (just as Kriegel uses the term 'qualitative'). This is the property of experience that we have called 'phenomenal character' or 'qualia'. Searle distinguishes this from experience being 'subjective', which for him has a different meaning. What does it mean for experience to be subjective or, in other words, for experience to have 'a subjective mode of existence', according to Searle? There are two ideas that we can extract from Searle's writing. First, for experiences to be subjective means that experiences only exist when experienced by a person or some other sort of 'subject'. This is very similar to the definition of experience that we found in Kekes. To recall: (S<sub>5</sub>) E is subjective =df. There

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<sup>45</sup> Ibid.: 94.

<sup>46</sup> Ibid.: 95.

<sup>47</sup> Searle 1997: xiv.

is some subject *S* which has *E*. This definition expresses a form of ontological dependence: experiences only exist when they are had by a person or 'subject'.

Second, there is the idea in Searle's writing, notably in the first passage, that a direct consequence of subjectivity is that we have a point of view and that experiences are perspectival. Now Searle calls this a 'consequence of' subjectivity rather than a definition of subjectivity, which makes sense given the fact that his interpretation of subjectivity is the same as Kekes'. That is to say, according to Searle, what it means for experience to be subjective is that the experience is had by a subject. Now, it follows from this, and is telling of subjectivity, that experiences are perspectival. After all, each person or subject has his/her own 'point of view'. We have already encountered the term 'point of view' in Nagel and we distinguished the following definition of subjectivity based on it: (S2) *E* is subjective =df. *E* is essentially connected to a single point of view. It seems, then, that Searle thinks that (S5) is the subjective-making property of experience, but that experience is also, as a consequence, subjective in the sense of (S2).

The second account of subjectivity in this set that I want to look at is from Georgalis. In *The Primacy of the Subjective*, Georgalis writes extensively about the subjectivity of experience. What does this term mean according to him?

Certainly a crucial element in an agent's phenomenal subjective state is the particular perspectival view she enjoys. This is the kernel of truth in the view of those – for example, William Lycan (1996, 2001) and Gilbert Harman (1990) – who would analyze subjectivity, in part, as consisting in the subject's unique perspective.<sup>48</sup>

According to this description of subjectivity, subjectivity consists (in part) in 'the subject's unique perspective'. Leaving the 'in part' qualification aside, what does it mean to say that subjectivity consists in 'the subject's unique perspective'? This is to say that persons, or subjects, have a point of view and that their experiences are always experiences from this point of view, which makes them perspectival. Georgalis' account of subjectivity is thus very similar to (S2) and can be reduced to it.

In *The Subject's Point of View*, Farkas also describes mental facts and mental states as being perspectival and essentially so. Let's take a look at the following passages:

The mind is essentially revealed from the subject's point of view.<sup>49</sup>

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<sup>48</sup> Georgalis 2006: 85.

<sup>49</sup> Farkas 2009: 30.

It may seem strange that some portion of reality is knowable by one person in this special way. An explanation of this circumstance is offered by the observation that mental facts are perspectival facts.<sup>50</sup>

For a minded being, things do not just surround one, but they appear to one in a certain way, they feel a certain way, they are enjoyed or they fill one with despair, things are desired or believed. This perspective includes not only the world around us, but also ourselves.<sup>51</sup>

In these passages, Farkas does not define subjectivity in particular as the fact that experiences are perspectival, but she does define 'the mind' as such. Even so, she does agree with Searle and Georgalis that experiences are perspectival. Both Georgalis' and Farkas' account of subjectivity can be captured by the definition of subjectivity (S2) that we found in Nagel's work. This concludes the discussion of the second set of three alternative accounts of subjectivity.

Before concluding this section, it should be noted that Jackson's knowledge argument is not discussed in this section or chapter since his argument is an argument that concerns the phenomenal character, or qualia, of experience. As we have seen, many philosophers identify qualia and subjective character of experience, but there are also many philosophers who don't. I will discuss Jackson's knowledge argument in Chapter 5 section 5.2.2, where I consider whether the subjectivity of experience interpreted as identical to qualia is a problem for naturalism or not.

What have we learned from looking at these two sets of accounts of subjectivity? From looking at the first set of papers in this section, we learned that many philosophers agree with Nagel's first or second definition, (S1) or (S2), in combination with (PV6). We have also seen that the ambiguity in Nagel's paper is reflected in the ambiguous and different positions other philosophers have taken in the debate since Nagel. On the one hand, it seems that Nagel is saying that experience is subjective solely in virtue of having phenomenal character, but, on the other hand, it seems as though he thinks that experience is only subjective in virtue of this phenomenal character having the further property of being accessible only from a particular point of view. In the debate after Nagel, as has become clear in this section, philosophers have taken both positions and have sometimes taken a position similarly ambiguous.

From the second set of papers we learned that even accounts of subjectivity that are more independent from Nagel's account still end up describing subjectivity in a very similar fashion. This shows that Nagel's account has not

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<sup>50</sup> Ibid.

<sup>51</sup> Ibid.



only been influential, but is also plausible, since others have arrived at the same conclusions as he has.

Overall, the conclusion that we can draw from this section is that other accounts of subjectivity in the literature fit the list of subjective-making properties (S1)-(S5) that we have composed. So it is not the case that we have adopted an idiosyncratic eccentric account, which does not correspond to any of the other ones in the literature. Quite the opposite: we have based our definitions on an influential and plausible account of subjectivity.

### 1.3 SUBJECTIVE-MAKING PROPERTIES

In this section, I will focus on two questions concerning the subjective-making properties (S1)-(S5). The first question I will address is whether experience is actually subjective in the ways specified by (S1)-(S5). In other words: does experience have the subjective-making properties that (S1)-(S5) describe? As we have seen, Nagel thinks that experience does have these properties. But, even though we have abstracted some of our definitions from Nagel's paper, we never presupposed that experience is in fact subjective in these ways. In section 1.3.1, I will discuss whether or not it is.

The second question that I will address in this section is whether other mental phenomena have these subjective-making properties. I will discuss this in section 1.3.2.

#### 1.3.1 Does Experience Have These Subjective-Making Properties?

In the previous sections we found five possible definitions of subjectivity. In order to be able to establish in Chapter 5 whether or not the subjectivity of experience is a problem for naturalism, we first need to know whether experience actually is subjective in any of the senses defined in the previous sections. As we have seen, Nagel claims that experience is subjective in these ways, but, in our search for definitions of subjectivity, we have bracketed the question whether anything is subjective in these ways. Now, it might cause confusion that we have defined the subjectivity of experience, yet that we have bracketed the question whether experience is actually subjective in these ways. Is there no contradiction there?

There is no contradiction between defining something and then going on to ask if that thing exists. Let me give some examples. In science, we define a particle (e.g. the Higgs particle) and then we do experiments to see if it exists. In general, we can ask what a predicate means and then see if anything satisfies

this predicate. For example, we can define a golden mountain as a mountain made of gold, and then we can go on to ask if there are such things as golden mountains. Similarly, even though we came up with possible definitions of the subjectivity of experience, this does not mean that experience actually is subjective. So far, we know what it means to say that experience is subjective (S<sub>1</sub>)-(S<sub>5</sub>), and now it is time to ask the question whether experience actually is subjective in any of these senses. After all, if nothing is subjective in any of these senses, then we need not consider whether these definitions of subjectivity are a problem for naturalism, since then there will not exist anything subjective.

In what follows, I will discuss each definition and see if there are reasons to think that experience is subjective in the specified sense, i.e. if it has the subjective-making property expressed by the definition. The first possible definition of subjectivity that should be discussed is (S<sub>1</sub>). To recall:

- (S<sub>1</sub>) E is subjective=df. For all subjects S, if S has E, then there is something it is like for S to have E.

According to (S<sub>1</sub>), the subjectivity of experience is identical to the phenomenal character of experience. That is, what it is like to have an experience is the phenomenal character of the experience, as well as that property which makes the experience subjective (i.e. the subjective-making property). Now, is it the case that 'there is something it is like for S to have E'? That is, is it the case that there is something it is like for a person to have a particular experience? Not many philosophers, including naturalists, would want to deny this. However, some do. Therefore it is not uncontroversial to say that experience is subjective in this way. However, common sense does seem to suggest that there is something it is like to have an experience. After all, there is something it is like to see a red tomato, which is very different from what it is like to taste that same tomato. This means that different experiences have different phenomenal character, which implies that they have phenomenal character in the first place. And, even though one could deny that there is anything it is like to either see or taste a tomato (or for that matter, have any other kind of experience), this position has undesirable consequences. For example, if one wants to hold that there is no such thing as pain, then how does one explain its resulting behavior, such as the person in pain calling a doctor? If it would not be painful to be in pain, then why act on it? And if one thinks that there is nothing it is like to experience either pleasure or pain, then why do people strive to maximize the former and avoid the latter? It does not seem possible to make sense of our behavior (or even our concepts, in case of 'pain') if we

deny that there is something it is like to have experiences. Neither could we understand emotions, moods, art, music, motivations for actions, etc. Since I cannot see a way in which we can deny that there is something it is like to have experiences and make sense of these very important and basic things in our lives at the same time, I think we can safely say that the burden of proof lies on the side of those who want to deny that there is something it is like to have experiences. I cannot but tentatively conclude that there is something it is like to have experiences.

The next possible definition of experience, (S2), was also found in Nagel's work. Here it is again:

- (S2) E is subjective =df. E is essentially connected to a single point of view.

Is experience actually subjective in the way specified by (S2)? It seems like it is. After all, it seems impossible to have experiences without a point of view, i.e. without there being a particular subject (of experience), or in other words, a person. There has to be a subject, or person, in order for a token experience to be had, and for there to be anything it is like to have that experience.

The claim that experiences need to be had by a subject has been denied by a number of philosophers, most famously by Hume.<sup>52</sup> According to Hume there is no such thing as the self or 'the first person', but there are only bundles of impressions and ideas. Hume's reason for thinking that there are no persons or 'selves' is that in introspection we are aware of our impressions and ideas, but we never encounter a 'self'. This does not seem to be a particularly good argument against the existence of the self, for why would we expect the self to appear to us in the same way as an impression or idea? And why couldn't we say introspection is cognitive instead of purely observational? The fact that we do not observe the self in introspection in the same way we observe ideas does not seem to be a good reason to think there are no subjects of experience.

In addition to the fact that experiences are had by a subject, there are no token experience that more than one subject can have, which means that each token experience can only be had by one subject. Moreover, there are no experiences 'from a view from nowhere'. All these points together seem to suggest that experience is connected to a single point of view. Naturally, there is more to be said about what a point of view exactly is. However, for our purposes here it suffices to establish that there is an essential connection between a point of view and persons. In this light, it becomes clear that it is

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<sup>52</sup> Hume 1888.

impossible for there to be experiences without a point of view. It also becomes clear that it is impossible for there to be a person without experiences – given that this person is not a zombie, but in fact has consciousness, which I assume to be an essential feature of a person. It seems clear, then, that experience is subjective in the way specified by definition (S2).

But is experience also subjective if you interpret the concept of ‘point of view’ the way we have done in (PV6) or, in other words, is experience subjective in the way of (S2’)? According to (S2’), one can only know what it is like to have an experience if one has had that experience or an experience with sufficiently similar phenomenal character. Now, is it the case that you cannot know what it is like to have an experience if you have never had a similar experience? There are two points I want to make in answer to this question. First, I do think that it is unlikely that we can know what it is like to have an experience that is very different from any experience we have ever had. Nagel’s claim that we do not know what it is like to perceive the world by sonar is a good example in this respect. Similarly, I think I do not know what it is like to taste vegemite because I never have tasted it, and I do not know what it is like to be blind or deaf because I am not. I think that if anyone wants to argue that in fact you can know what it is like to have experiences that are very different from any experiences you have ever had, then the burden of proof lies on their side. Personally, I do not have these imaginative powers.

The second point I want to make here is that even though I think experience is subjective in the sense of (S2’), there is a weakness in its formulation. A crucial term used in (S2’) is the term ‘sufficiently similar’: you can know what it is like to have an experience if you have had experiences with sufficiently similar phenomenal character. But when is phenomenal character sufficiently similar? As I indicated before, there is room for debate here, which means that whether or not one accepts (S2’) partly depends on the interpretation of the term ‘sufficiently similar’. Despite the fact that people might not agree on which kinds of phenomenal character are sufficiently similar, I do think that the gist of (S2’), that we cannot know what it is like to have experience with phenomenal character that is *not* sufficiently similar, is true.

It seems, then, that, so far, experience has these two subjective-making properties. But does it have even more subjective-making properties? Let’s take a look at the next possible definition:

(S3) E is subjective =df. E is private.

We already discussed this definition a little bit in the relevant section. We said there that indeed a token experience and its token phenomenal character can

only be had and accessed by one person. For example, you can know what it is like for me to taste lemon, since you have tasted lemon before (and thus have had an experience with sufficiently similar phenomenal character), but you cannot access my 'taste' of the lemon and, as it were, share my token experience and its token phenomenal character. Granted, you can have an experience of the same kind and it can be very similar for you what it is like to have this experience as it is for me, but token experiences and their phenomenal character can only be had and accessed by one person. Experience is thus clearly subjective in the way that experience and its phenomenal character are always and necessarily private.

What about the next, related, possible definition of subjectivity?

- (S4) E is subjective =df. E can only be known from a first person point of view.

From the fact that token experiences are private (S3) it follows that one cannot know (at least not directly) what someone else experiences.<sup>53</sup> After all, only Jack has his token experiences and consequently only Jack can know (that he has) them from a first person point of view. However, it might seem that even though we cannot access Jack's token experiences and even though we cannot have knowledge of them 'directly', there are ways to find out what Jack is experiencing. Clues can be obtained from studying Jack's behavior (such as facial expressions, actions) and even more easily by listening to Jack's description of his experiences. If Jack tells Jill 'I have a headache', Jill can take this as pretty reliable evidence that Jack has a headache and, since Jill has had headaches before, she knows what Jack experiences. But does she? Do we really know (about) other people's experiences?

On the one hand, it seems that we do. If we cannot trust language to be a reliable, we would not only be in the dark about other people's experiences, but we could not have any sort of knowledge from testimony, which would leave us in a rather dim place in general. But this does not take away that there are limitations to what can be conveyed by language – especially when there is no way to verify statements – as is the case when the objects of such statements are private, such as experiences. Let me explain. If Jack tells Jill he bought a new car, Jill can verify this statement by going out to his garage, checking his insurance papers, checking his bank transactions and so on. However, if Jack

<sup>53</sup> That is, if you are not an identity-theorist and think that experiences are identical to brain states. I will address the identity theory as an objection against my overall argument in section 5.6.2.

tells Jill he is having a terrible pain, there is not much she can do to verify this statement. If Jack is flat out lying, Jill could maybe pick up on certain signals: e.g. if his face is relaxed or he is smiling she might doubt that he is speaking the truth. But if Jack's behavior and facial expression match with what he is saying, Jill can only believe Jack is speaking the truth (or not).

Let's say Jack says he is in pain and he is not lying, his behavior is in line with his claim and, from everything Jill has to go on, it seems that Jack is in pain. But in how much pain is Jack? This is where the trouble starts. It seems we don't have an objective way to measure pain. There are some things we can do to narrow it down, such as asking Jack to rate his pain on a scale from 1-10 (10 being the most pain and 1 being pain-free) and we can ask Jack to compare the pain he is currently having with past pains of the same type or with past pains of a different type. For example, we can ask Jack: 'Does your headache hurt more than the one you had last month?' or 'Does your headache hurt more than the toothache you talked about 6 months ago?' Answers to these questions might help Jill establish just how bad Jack's headache is, but it will not enable her to pin down exactly and most importantly 'comparatively' how bad the headache really is. That is, not only will Jill not know exactly where to place Jack's headache on a scale of 1-10, she will also not be able to know whether his headache is worse than the one she had a few days ago. After all, if Jack rates his headache a 5, how does he come to this rating? The way we rate our own pains is, presumably, based on comparing and contrasting them with our pain-free state as well as past and/or other pains. This means that the rating of a particular pain is only significant in a particular context: the subject's own context. Jill's headache could be as bad objectively, but she might only rate it a 3 or a 4, in comparison with her past pains (e.g. if she has had worse headaches more often than Jack). So, even if we use a tool to express the intensity of our pains (the scale 1-10), this informs us to some extent, i.e. we can place someone's pain in relation to their other pains, but it does not inform us fully; we will still not be able to compare the intensity of this pain to anyone else's pain. The tool cannot be used 'objectively'.

An additional difficulty is that even if one can know someone else's experiences, one cannot know that one knows. Let me explain. Say that Jack and Jill would both rate the headache that Jack has as a 5; Jack does so because he feels that this is how his headache compares to his previous headaches and pains and Jill does so out of pure luck (or out of great imaginative powers; it does not matter for the argument how she comes to rate it this way). Now, even though Jill 'knows' Jack's experience, there is no way for her to verify and check that she does. We have reason to believe that experience can only be accurately described from a first person point of view, from which it follows

that only from a first person point of view can it be established whether or not that description is correct. This means that, even if we think we know someone else's experiences, there is no way to verify. This seems to suggest that (S4) is true and one can only fully know experiences from a first person point of view.

The next possible definition of the subjectivity of experience is the one we found in Kekes' paper:

(S5) E is subjective=df. There is some subject S which has E.

Can we give examples of (S5)? As we already discussed, an experience is necessarily an experience of a subject: there are no experiences without an 'experiencer'. Since experience is always had by a subject, just any example of any experience will show experience to be subjective in this way.

In sum, then, it seems that experience is actually subjective in all five senses that we have found: there is something it is like to have experiences, experiences are connected to a single point of view, experiences are private, experiences can only be fully known from a first person point of view and experiences are had by a subject. These claims are not uncontroversial, but we have given examples and/or reasons to think that experience is subjective in these senses. For now, we can therefore conclude that experience is in fact subjective.

### 1.3.2 Do Other Mental Phenomena Have These Subjective-Making Properties?

At the end of this chapter, I briefly want to consider the question whether other mental phenomena have the same subjective-making properties that experience has. After all, it is not only said of experience that it is subjective, but of the mental in general. Now, as I said at the beginning of this chapter, there is no reason to assume a priori that every mental phenomenon is subjective in the same way(s), viz. by having the same subjective-making property(/ies). But now that we have found several properties that make experience subjective, we can check whether other mental phenomena are subjective in the same ways. One qualification is in place, which is that about each of these phenomena many books can and have be(en) written. Therefore I do not pretend to cover much ground or make any exhaustive claims by discussing them briefly. The only intention of this section is a brief reflection on the applicability of the subjective-making properties that we have found to these mental phenomena.

Do other mental phenomena have the same subjective-making properties

that experience has? Since the definitions of subjectivity that we have found, (S1)-(S5), are all in terms of 'experience', we will need to abstract a general definition for each definition of the subjectivity of experience. Which general definitions of subjectivity can we abstract from our definitions (S1)-(S5)? Here is a list of the general definitions of subjectivity that we can abstract:

- (S1\*) X is subjective =df. For all subjects S, if S has X, then there is something it is like for S to have X.
- (S2\*) X is subjective =df. X is essentially connected to a single point of view.
- (S3\*) X is subjective =df. X is private. Or: X is subjective =df. For all subjects S, if S has X, then only S has X.
- (S4\*) X is subjective =df. X can only be known from a first person point of view.
- (S5\*) X is subjective =df. There is some subject S which has X.

In what follows, I will check whether or not other mental phenomena have these subjective-making properties that experience has.

Does 'phenomenal character' have the same subjective-making properties as experience? 'Qualia' or 'phenomenal character' is a (supposedly) mental phenomenon that receives a great deal of attention in the literature and that we have already encountered in this chapter. Earlier we described what it means for experience to have phenomenal character but, to refresh our memory, here is another description of the hand of Tye:

Feelings and experiences vary widely. For example, I run my fingers over sandpaper, smell a skunk, feel a sharp pain in my finger, seem to see bright purple, become extremely angry. In each of these cases, I am the subject of a mental state with a very distinctive subjective character. There is something it is *like* for me to undergo each state, some phenomenology that it has. Philosophers often use the term 'qualia' (singular 'quale') to refer to the introspectively accessible, phenomenal aspects of our mental lives.<sup>54</sup>

As we established before, and as is clear from this passage, phenomenal character is a phenomenon that is very closely related to the subjectivity of experience.

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<sup>54</sup> Tye 2009.



rience, so closely, that as a matter of fact the subjectivity of experience and its phenomenal character are often identified. According to one of the definitions of subjective-making properties that we found, (S<sub>1</sub>), – the definition that, as we saw, is among the most popular in the literature – the subjective-making properties of experience are identical to the phenomenal properties (phenomenal character, or ‘qualia’) of experience. According to (S<sub>1</sub>), we can thus say that phenomenal character *is* the subjective-making property of experience. But does phenomenal character have the other subjective-making properties?

Phenomenal character turns out to have all the subjective-making properties that we distinguished and that experience has as well. After all, phenomenal character is essentially connected to a single point of view (S<sub>2</sub><sup>\*</sup>): what it is like to have a certain experience is not the same for everyone but depends on the (kind of) subject that is having the experience. Phenomenal character is also private (S<sub>3</sub><sup>\*</sup>): token phenomenal character can only be had by one individual and what the phenomenal character of an experience is like cannot be known directly by anyone other than the subject of the experience. This means that phenomenal character can only be known from a first person point of view (S<sub>4</sub><sup>\*</sup>). Phenomenal character is had by a subject (S<sub>5</sub><sup>\*</sup>), albeit in an indirect way, since phenomenal character is a property of experience, which is had by a subject. Phenomenal character thus has all the subjective-making properties (S<sub>1</sub><sup>\*</sup>)-(S<sub>5</sub><sup>\*</sup>).

Next, I want to consider whether the phenomenon self-consciousness has these five subjective-making properties. Before we can answer this question, another question needs to be answered: What is self-consciousness? As the word suggests, self-consciousness is the kind or part of consciousness that concerns the self; it is consciousness or awareness of the self.<sup>55</sup> Here is a description of a phenomenological view of self-consciousness:

On the phenomenological view, a minimal form of self-consciousness is a constant structural feature of conscious experience. Experience happens for the experiencing subject in an immediate way and as part of this immediacy, it is implicitly marked as *my* experience. (...) In the most basic sense of the term, self-consciousness is not something that comes about the moment one attentively inspects or reflectively introspects one’s experiences, or in the instant of self-recognition of one’s image in the mirror, or in the proper use of the first-person pronoun, or in the construction of a self-narrative. Rather, these different kinds of self-consciousness are to be distinguished from the pre-reflective self-consciousness which is present whenever I am living through or undergoing an experience, i.e., whenever I am consciously perceiving the world, whenever

<sup>55</sup> It is open for debate how self-consciousness relates to consciousness simpliciter. According to some, self-consciousness is identical to consciousness (e.g. Kriegel), though these phenomena are often distinguished. Whether self-consciousness is a kind or ‘part’ of consciousness is also open for debate.

I am thinking an occurrent thought, whenever I am feeling sad or happy, thirsty or in pain, and so forth.<sup>56</sup>

Now, does self-consciousness have the five subjective-making properties? Does self-consciousness have the property that there is something it is like for a person to have it (S1\*)? Yes, there is definitely something it is like for a person to have self-consciousness. Moreover, self-consciousness is strongly related to qualia and phenomenal character; without self-consciousness we would have no way of knowing whether there is something it is like for us to have experiences. And, without any kind of consciousness, there would not be anything it is like to have any kind of experience. It is in part due to self-consciousness that we know about phenomenal character, so it is certainly true that self-consciousness has the property that there is something it is like for a person to have it. It must be said here, though, that for anything that we can experience, there is something it is like to have it. Asking this question is therefore most often an open door, which is why I will not repeat the same discussion for all the other mental phenomena. We can safely assume that they are all subjective in the sense specified by (S1\*) if I do not discuss this matter explicitly.

But is self-consciousness subjective in any of the other ways? We can group definitions (S2\*) and (S5\*) together, since they both rely on the same premise, namely that the phenomenon should be had by a subject and as such is essentially connected to a single point of view. Now, self-consciousness without a doubt has these subjective-making properties. After all, self-consciousness is essentially connected to a point of view (S2\*) and self-consciousness is had by a subject (S5\*). We can therefore say that self-consciousness has these subjective-making properties.

Does self-consciousness also have the subjective-making properties expressed by (S3\*) and (S4\*)? Is self-consciousness private and can it only be known from a first person point of view? Yes, self-consciousness is private and can only be known from a first person point of view. Self-consciousness, if anything, can only be accessed by one person. Also, it can clearly only be fully known from a first person point of view since the only way to access self-consciousness is by introspection. Self-consciousness thus has all the subjective-making properties that experience has.

Let's look at intentionality next. What is intentionality? The mental is considered to be intentional because the mental is always directed at something other than itself and it is always *about* something: our thoughts are about the world that surrounds us; our beliefs, desires and hopes all have objects, etc.

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<sup>56</sup> Gallagher and Zahavi 2009.

Intentionality is the power of minds to be about, to represent, or to stand for, things, properties and states of affairs.<sup>57</sup>

Is intentionality subjective in the same way in which experience and self-consciousness are subjective? Whether intentionality is subjective according to (S1\*) is a topic of debate. It used to be thought that intentionality and phenomenal consciousness are two separate issues, but more and more philosophers seem to think that they are indeed intertwined. The idea that intentionality does not have anything to do with phenomenal character is not so common.

Intentionality is also essentially connected to a single point of view (S2\*). After all, without a point of view, there could be no intentionality. For the mental to be intentional means that it is always directed at something. If it is directed at something, it needs a point of view from which it is so directed. There has to be something which is 'doing' the directing or the 'aboutness'.

Our token experiences, thoughts and feelings that are intentional can only be had and accessed by ourselves, which means that intentionality also has the subjective-making property described by definition (S3\*): privacy. For this reason, it can also be said that intentionality can only be fully known from a first person point of view (S4\*).

Intentionality is also always had by a subject (S5\*). This claim is not uncontroversial. For example, Dretske argues that anything that refers to something else is intentional, including a rash on your skin and words on paper. Even though this should be considered, I think there is a good case to be made for the conclusion that only subjects can have intentionality in the true sense of the word. Therefore we can say that intentionality has all the subjective-making properties that experience and self-consciousness have.

The next mental phenomenon that should be discussed is the first person perspective. The term 'first person perspective' is vague, but Baker offers a helpful description of it in her paper "The First Person Point of view: A Test For Naturalism".<sup>58</sup> Here she writes that the first person point of view is a certain ability that self-conscious organisms have. Which ability is this?

One has a first person perspective iff one has the ability to conceive of oneself as oneself, where this ability is signaled by the linguistic ability to attribute as well as to make first person reference to oneself.<sup>59</sup>

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<sup>57</sup> Jacob 2008.

<sup>58</sup> Baker 1998.

<sup>59</sup> Ibid.: 332.

As such, the first person perspective is a necessary and sufficient condition for self-consciousness. As Baker writes:

A conscious being becomes self-conscious on acquiring a first person perspective – a perspective from which one thinks of oneself as an individual facing a world, as a subject distinct from everything else.<sup>60</sup>

Does the first person perspective, if we interpret it the way Baker does, have the five subjective-making properties that we found? I think we should say that there is something it is like to be able to conceive of yourself as yourself, i.e. to have a first person perspective. The first-person perspective thus is subjective in the sense of (S1\*).

Trivially, the first person perspective is subjective in the sense of (S2\*): a first person perspective is essentially connected to a single point of view. The ‘perspective’ and ‘point of view’ in question might be two metaphors for the same phenomenon. The term ‘first person point of view’ also functions in definition (S4\*), which suggests that the first person perspective is also subjective in the sense of (S4\*): a first person perspective can only be known from a first person perspective. A first person point of view is also private (S3\*); after all, only one person can conceive of him- or herself as him- or herself. It seems then that a first person point of view is also subjective in the sense that experience is subjective.

Finally, I want to consider whether secondary qualities of objects have the same subjective-making properties as the phenomena above. What are secondary qualities of objects? Here is McGinn’s description:

Secondary qualities are properties that produce sensations in observers, such as colour, taste, smell, and sound. They can be described as the effect things have on certain people.<sup>61</sup>

According to the Lockean tradition, secondary qualities are defined as those whose instantiation in an object consists in a power or disposition of the object to produce sensory experiences in perceivers of a certain phenomenological character; whereas primary qualities are said not to consist in such dispositions to produce experiences.<sup>62</sup>

Do secondary qualities of objects have the same subjective-making properties? It seems to depend on one’s understanding of secondary properties how one would answer this question. If you think that secondary properties are just a

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<sup>60</sup> Ibid.: 328.

<sup>61</sup> McGinn 1983.

<sup>62</sup> Ibid.

special kind of primary properties that have an objective basis in the object of which they are predicated (e.g. like Van Inwagen thinks<sup>63</sup>), then they are not essentially connected to a single point of view, they are not had by a subject, we do not always know them and they can be experienced and described by more than one person. However, if one is inclined to think secondary properties are identical to the sensations that they cause (e.g. like Berkeley), then secondary properties are essentially connected to a single point of view, they are had by a subject, we know them from a first person point of view and they cannot be experienced and described by more than one person. It would present us with too much of a detour to go into this more fully and decide on the nature of secondary qualities of objects here.

The most appropriate conclusion to draw here is that it is unclear whether secondary properties of objects have the same subjective-making properties as the other mental phenomena do. Of course, secondary qualities of objects are very different in nature than the other 'mental phenomena' on our list and, therefore, it makes sense to find that it is not clear whether they have the same subjective-making properties.

In this section we have found, then, that most other mental phenomena have the same subjective-making properties as experience: qualia, self-consciousness, intentionality and the first person perspective all do. The only phenomena for which we were unable to establish, at this point, whether it has the same subjective-making properties are the secondary qualities of objects. As we pointed out before, secondary qualities of material objects are different in kind than the other purely mental phenomena that we discussed; therefore it makes sense that the results are (possibly) different. Since all the 'purely' mental phenomena are all subjective in the same ways, it could be the case – even though we haven't shown this here – that subjectivity applies univocally to the mental.

#### 1.4 CONCLUSION

In this chapter we have looked at a number of definitions of the subjectivity of experience that are given in the literature and some further definitions suggested by the discussion of those. We started out in section 1.1 by analyzing Nagel's account of subjectivity in his paper which is a classic in this field. We found two possible definitions of the subjectivity of experience in Nagel's

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<sup>63</sup> Van Inwagen 1993.

work and we extensively discussed the notion of 'point of view', which plays an important role in his account of the subjectivity of experience.

Then, in section 1.2, we discussed several other papers in the literature to see if they offer any alternative definitions of the subjectivity of experience. We added a few possible definitions to our inventory and then we compared our definitions to other accounts of subjectivity in the literature. We concluded that the other accounts in the literature fit our definitions (S1)-(S5) very well. We discussed in detail whether De Sousa's inventory of senses in which experience is subjective maps onto ours and concluded that it does.

In the last section of this chapter, 1.3, we considered whether experience is actually subjective in any of these senses by giving examples of the particular phenomena. We also briefly discussed whether other mental phenomena have the same subjective-making properties or not. We found that, in fact, experience is subjective in these five senses and that most other mental phenomena seem to have the same subjective-making properties. Only secondary qualities of objects might not have the same subjective-making properties.

In Chapter 5 we will see if the definitions of which we were able to give examples, i.e. the definitions that describe the subjectivity of experience as it actually occurs, are a problem for naturalism or not. Basically, then, we have taken the very vague notion of 'subjectivity' and we have offered several possible definitions of it. If any of these definitions is incompatible with naturalism, then we can say that, if this is what subjectivity means, then the subjectivity of experience is incompatible with naturalism in this particular way. For our purposes, i.e. to establish whether the subjectivity of experience is compatible with naturalism or not, it does not matter which of the definitions we have considered is actually the best definition of the subjectivity of experience (if there even is one); we have therefore not considered this question in this chapter.



## Do Experiences Exist?

So far, I have assumed that experiences exist, or, that there is such a thing as experience. In the first chapter, where I analyzed what it means to say that experience is subjective, I relied on an intuitive understanding of the notion of experience. Using this intuitive notion, we concluded that experience – assuming that there is such a thing – is subjective in the five senses that we distinguished. But the crucial question remains: Is there such a thing as experience? If there isn't, then there is also no such thing as the subjectivity of experience and, in that case, we need not worry about its possible incompatibility with methodological naturalism. In that case, the question whether the subjectivity of experience is compatible with methodological naturalism does not even arise. The purpose of the present chapter is to determine whether or not there are such things as experiences, an important question that we have put on the shelf since the Introduction.

The organization of this chapter is as follows. I will set out by addressing the question of what I mean when I use the term 'experience', section 2.1.1. After a number of clarifications, I will briefly consider which kinds of experiences there are and which aspects experience has, section 2.1.2. I will conclude this section by considering what the ontological structure of experience is; section 2.1.3.

After sorting out these terminological issues, I will consider two arguments against the existence of experience in section 2.2: (i) an argument from awkwardness, in section 2.2.1 and (ii) Byrne's argument against the existence of experience, in section 2.2.2.

Having seen some of the arguments against the existence of experience, I will then turn to a strong argument for the existence of experience, in sec-



tion 2.3. With help of Van Inwagen Quine's criterion of ontological commitment presents a strong argument in favor of the existence of experience.<sup>1</sup> This will lead to a discussion of behaviorism and eliminative materialism, which present two potential ways of reply to this powerful pro argument, sections 2.4 and 2.5 respectively.

In the last section, 2.6, I will draw conclusions and summarize this chapter.

## 2.1 WHAT ARE EXPERIENCES?

In this section, I will explain what I mean and, more importantly, what I don't mean, by the term 'experience'. In section 2.1.1 I will list six points of clarification concerning my use of the term 'experience'. In section 2.1.2 I will present a small inventory of the different kinds and aspects of experience. Finally, in section 2.1.3 I will discuss which ontological categories experience could be said to fall into or, in other words, what the ontological structure of experience can be said to be.

### 2.1.1 The Term 'Experience'

First of all, I want to make clear that I am here not interested in the nature of experiences, i.e. in the question whether or not experiences are 'mental' or 'physical' (or possibly 'neutral'). Any decision in this matter would beg the question since the main question of this dissertation is whether the subjectivity of experience is compatible with naturalism. Moreover, the meanings of the terms 'mental' and 'physical' are troublesome. In Chapters 3 and 4 I write extensively about what 'naturalism', 'physicalism' and 'materialism' mean and what it means for something to be 'natural', 'physical' or 'material' and not any of these terms has a clearly defined and commonly accepted meaning. It is even less clear what the term 'mental' means, partly so since 'mental' often is taken to mean 'non-physical'. For these reasons, I will not make any assumptions about the nature of experiences, nor will this be a topic of discussion. As long as there are experiences – which the current chapter addresses – it is not necessary for our purposes to know about their nature.

Second, I want to make clear that I am furthermore not interested in

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<sup>1</sup> The form that the first part of this chapter takes, i.e. a section contra experience, followed by a section pro experience, and the use of Quine's metaontology as a way out of the created impasse, is inspired by Van Inwagen's paper "A Theory of Properties" (2004), where he uses this model in developing his argument for the existence of properties.

determining into which ontological category ‘experiences’ fall. Experiences could be properties, property-instances, tropes, universals, states of affairs, events, activities, etc. Despite the fact that this is an interesting question in its own right, I will here not try to decide upon the matter. Whatever ontological category experiences fall into, if they exist, they are subjective (according to the first chapter) and the question whether or not their subjectivity is compatible with methodological naturalism arises. It is not necessary for answering this question into which ontological category experiences fall. What I will do, however, is give an overview of the possible ontological categories into which experience could be said to fall. I believe this will clarify the concept of experience, even if we will not determine which of these classifications is the best one.

This leads us to a third important point of clarification. In this chapter, I will both be using the term ‘experience’ and the term ‘experiences’. I will be using either term where it seems to make more intuitive or grammatical sense but do not intend for it to exclude the other term at that instance. I assume the general term ‘experience’ refers to a type and the term ‘experiences’ refers to tokens of that type. So, I think that there are token as well as type experiences.

Fourth, obviously the term ‘experience’ is closely related to a great number of other terms, such as ‘consciousness’, ‘awareness’, ‘mental states’, etc. No doubt the connection between these terms is as interesting as it is complicated. Unfortunately, getting into a discussion about all these connections would be monumental and a distraction from the task at hand. In what follows, therefore, I will be focusing exclusively on the concept of experience and I will leave its relationship to these other concepts to the side.

Fifth, there is a popular distinction between experience considered as an ‘object’ and experience considered as an ‘act’. Although this act-object distinction is interesting in its own right, I will be neutral on this topic. Just as I am not interested in the ontological category that experience should be said to fall into, I am also not interested in defending the claim that experience is either an object or an act.

Sixth, there is an ongoing debate about whether we can distinguish between two species of experiences: conscious experiences on the one hand and non-conscious experiences on the other hand. In what follows, I will primarily be interested in conscious experience, because these are the paradigm cases of ‘experiences’. But nothing hangs on whether there are such things as non-conscious experiences, as long as there are at least experiences of one of the types. The argument in this chapter will follow through independently of the outcome of this debate.

## 2.1.2 Kinds of Experiences

Despite the fact that I will not try to determine what the nature of experiences is or which ontological category ‘experience’ should be said to fall into, there are two things about experience that I do want to consider briefly. First, what are the different kinds of experiences? And, second, which aspects or properties do experiences have?

There are many different kinds of (conscious) experience. The kind of experience that is talked about most and which provides us with most of our examples and intuitions is perceptual experience. Perceptual experiences include: visual experiences; auditory experiences; tactile experiences; olfactory experiences and gustatory or taste experiences. Possibly perceptual experiences also include bodily sensations such pain(s), itches, hunger, proprioception, etc.

Then there are, less often mentioned and less straightforward, cognitive experiences, such as having a certain insight; drawing a conclusion; having a particular thought, etc. In his catalogue of conscious experiences, Chalmers calls this kind of experience ‘conscious thought’<sup>2</sup>, and he holds that there is something it is like to have such thoughts:

It is often hard to pin down just what the qualitative feel of an occurrent thought is, but it is certainly there. There is something it is like to be having such thoughts. When I think of a lion, for instance, there seems to be a whiff of leonine quality to my phenomenology: what it is like to think of a lion is subtly different from what it is like to think of the Eiffel tower.<sup>3</sup>

Closely related to cognitive experiences is a form of experience constituted by visual or mental imagery. This kind of experience includes: visual memories; fantasies; having dreams. Another kind of experience is emotional experiences such as getting mad, feeling sad, experiencing relief, etc. Chalmers puts it very well:

The sparkle of a happy mood, the weariness of a deep depression, the red-hot glow of a rush of anger, the melancholy of regret: all of these can affect consciousness profoundly, although in a much less specific way than localized experiences such as sensations.<sup>4</sup>

In addition to these kinds of experiences that are often distinguished, Chalmers distinguishes an extra kind, which he calls ‘the sense of self’. This

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<sup>2</sup> Chalmers 1996: 9.

<sup>3</sup> Ibid.: 10.

<sup>4</sup> Ibid.

kind of experience is supposed to be the phenomenology of self that we experience in the background of all our other (kinds of) experiences. In Chalmers' own words:

One sometimes feels that there is something to conscious experience that transcends all these specific elements: a kind of background hum, for instance, that is somehow fundamental to consciousness and that is there even when the other components are not. This phenomenology of self is so deep and intangible that it sometimes seems illusory, consisting in nothing over and above specific elements such as those listed above. Still, there seems to be something to the phenomenology of self, even if it is very hard to pin down.<sup>5</sup>

I trust that these are the most important kinds of experiences and that we now at least have some idea of what we mean when we talk about 'experience'.

Second, there are not only different kinds of experiences, but experiences also have different aspects, or properties. We have already encountered phenomenal character as one set of properties of experiences, namely phenomenal properties. But experiences have other aspects as well: experiences have objects and contents, which we already briefly discussed in the first chapter. What are the contents of experiences? The content of an experience is the way the experience represents the world as being. This is why the content of experience is also called the representational content. Other forms of content include: conceptual content and propositional content (and various combinations of these).

### 2.1.3 Structure of Experiences

What are experiences, ontologically speaking? Or, in other words, what is the metaphysics or structure of experiences? Even though we won't decide on this matter in this chapter, I do want to make clear what the possible structures of experiences are. There are a number of options here.

The first major distinction between rival ontological categories of experiences can be drawn between those according to which experiences are monadic and those according to which experiences are relational. There are two options for those who consider experiences to be monadic. First, one can be an adverbialist. According to the adverbialist, experiences are monadic properties. For example, in the case in which I see a blue cup, I would have the property of 'seeing bluely' or 'being appeared to bluely'. According to this view, having perceptual experiences, by itself, does not amount to the perception of physical objects. We do not stand in a relation to physical objects, but

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<sup>5</sup> Ibid.

we have the properties of seeing objects and colors, or being appeared to in certain ways. This view has the problem that it seems undesirable that we never perceive any objects. Another problem is that it works better for perceptual experiences than for other kinds of experiences.<sup>6</sup>

The second option for regarding experiences as non-relational is to say that experiences are events. An event is an occurrence of something or something that happens. Examples of non-mental events include: the Iraq invasion; the election of Barack Obama as president of the United States in 2008; a passerby smiling, and so on. There is some dispute as to whether events should be considered to form their own ontological class, but there is even more dispute about the notion of mental events. Mental events, if there are such things, would include: Jack's decision to move to France, Jill's desire to go to Asia, my remembering what day the party is, etc. The question is whether these events are genuinely of a different kind than physical events, or if the distinction between mental and physical events is merely semantic. In the former case, one would have a sort of physicalism, in the latter a form of monism. There is much left undecided in the debate about mental events. Setting these difficulties aside for now, it is an option that experiences are in fact events and there are some philosophers who have embraced this option. Byrne, who does not endorse this option himself, describes it this way<sup>7</sup>:

Granted that experiences are particulars, there is only one plausible basic category under which they fall: they are events. Experiences are like flashes, bangs, conferences, cricket matches, parties and races. They are particular things that occur and happen; they are (at least paradigmatically) extended in time, and have a beginning, a middle and an end.<sup>8</sup>

Famous philosophers mentioned by Byrne who think that experiences are events are Searle and Peacocke. Searle writes about experiences: 'visual and other sorts of experiences are conscious mental events'.<sup>9</sup> More about events in section 2.3.

There are also those who think that experiences should be considered to be relational, i.e. for a subject to have an experience is for a state of affairs

<sup>6</sup> An option that I am not discussing here is the disjunctivist view according to which we do perceive objects in cases of veridical perception, which is perceptually and phenomenally indistinguishable from cases of illusion and hallucination in which we merely have the monadic property of 'being appeared to bluely or pink-rat-ly'.

<sup>7</sup> It should be noted that Byrne (2009) does not endorse the idea that experiences are events. In fact, Byrne defends the claim that experiences do not exist.

<sup>8</sup> Byrne 2009: 431.

<sup>9</sup> Searle 1983: 45.

to obtain such that the subject bears a relation to the relevant relatum. What is the relevant relatum? The relevant relatum is the object of the experience. In turn, there are several options for what the object of experience is. The first option is to regard experiences as states of affairs in which subjects bear relations to peculiar kinds of mental entities, which are sometimes called sense data. This view is problematic and not very widely defended.

The second option is to say that the object of experience, and so the relatum other than the subject, is simply an object in the world. This view is known as naive realism. For example, if I am looking at a blue cup, the experience could simply be the state of affairs that obtains because of the relation between the blue cup and me. Even though this seems a better option than the previous one, it does seem that the internal aspect of experiences is somewhat overlooked on this conception of experiences. For perceptual experience, there is the further difficulty that this kind of view cannot account for hallucinations – after all, if experience is simply a relation between the perceiver and the object of perception, a form of direct realism is entailed.<sup>10</sup> This view is also problematic for experiences that are of a different type than perceptual experiences. A case where someone is in pain is just not as straightforward as a case wherein someone perceives a blue cup: is the pain the object of the experience, the other relatum? That seems strange. But if not the pain, but, say, my (hurting) knee is the object of experience, and the experience merely results from the relation between my knee and myself (or, my consciousness), then where does the pain go? A related problem is that there are many different mental attitudes that we can have towards the same object. For example, I can remember the blue cup, I can hate it, I can imagine it, I can like it, etc. In all these cases, it seems that on this view, the experience would be captured by a relation between the cup and me. But where do the differences between all these mental attitudes go? To hate something and to imagine it are certainly two very different mental states, but the relations in question would be the same. Unless of course, we use a three-place relation and reserve a variable exactly for the mental attitude that relates the subject and object of experience. Then, however, it seems that we reintroduce the concept of ‘experience’ through the back door.

A third option is to regard experiences as states of affairs in which subjects bear relations to propositions. For example, if I perceive a blue cup in this case, the state of affairs involves the relation between the proposition ‘There is a blue cup on the table’ and me. If this view is accurate, then in perception we would only be related to abstract objects, namely propositions, and not

<sup>10</sup> This is why disjunctivists say that hallucinations are not experiences, but something else.

to anything concrete or particular. This part of the view is often taken to be implausible.

It should be noted that in all these cases, the state of affairs in question is a particular, token state of affairs, not a universal. This is why these relational views of experience can also be seen as events, namely as property instances. In general it should be noted that, even though we have treated ‘experience’ and ‘mental state’ as synonyms, this does not exclude the option of experiences being events in those cases. Even though experiences are sometimes called ‘states’, this does not rule out that they are in fact events (it also does not rule out that they aren’t). Byrne writes the following about this issue:

Sometimes experiences are said to be states, which suggests that they are *properties* or *conditions* of a certain sort, not events. But although in some contexts states are contrasted with events, in philosophy of mind ‘state’ not infrequently functions as a convenient umbrella word, with ‘mental state’ meaning ‘mental condition, event, phenomenon, or whatever’.<sup>11</sup>

This concludes our discussion of the different ontological structures that experiences can be said to have. As I indicated before, there is no space here to consider each of these options more than briefly or to try to determine which one is the best one. For this section, it was merely intended to provide an overview of the different kinds, aspects and structures that experiences can be said to have.

## 2.2 CONTRA: ARGUMENTS AGAINST THE EXISTENCE OF EXPERIENCE

So far I have assumed that there are such ‘things’ as experiences, but are there? Maybe experiences are just ‘illusions’ and, thus strictly speaking, non-existent. What are the reasons to think that there is no such thing as experience or, in other words, that experience is an illusion? In order to answer this question I will look at two arguments against the existence of experience. In section 2.2.1 I will discuss the argument from awkwardness and in section 2.2.2 I will discuss Byrne’s argument against the existence of experience.

### 2.2.1 Argument from Awkwardness

The first argument against the existence of experience is an argument from awkwardness. Even though I call it an argument, as a matter of fact, it is not

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<sup>11</sup> Byrne 2009: 432.

really an argument – it is more a pre-theoretical intuition that people might have when they consider whether or not experiences should be said to exist. The intuition in question is that experiences are very different from medium-sized dry goods, such as tables and chairs, which are the paradigm cases of things that exist. The question whether or not experiences exist might, in this light, seem awkward and one might think that, in any case, they don't exist in the same way as ordinary material objects do. Or one might even think that, if what it means to exist is to be relatively similar to a table or chair, that experiences certainly do not exist.

Two things should be said in response to this intuition. First, however common it might be, it would be biased to think that 'that which exists' has the same extension as 'that which is physical'. Perhaps medium-sized dry goods are the paradigm case of existing things, but many of us believe that numbers exist, that sentences have meaning, that there is love and that there are beautiful ideas that we can enjoy. Naturally, this does not take away the intuition that, if they exist, experiences are awkward entities unlike tables and chairs. I think that would be fair to say. I even think it would be fair to say that if we could do without them, we should. In this respect, the case of experiences is similar to the case of universals. Universals are unlike tables and chairs in a number of ways and are therefore awkward entities that some of us are not happy to admit into our ontologies. However, it seems that we need universals to do work for us, so, even though it would be better to do without them, many think we simply can't without paying a high price. Similarly, the intuition that experiences would be awkward entities might be a *prima facie* argument against their existence; it is not sufficient. There are other awkward entities and although awkward, we just might need them to do work for us.

### 2.2.2 Byrne's Argument against Experience

Byrne's argument against the existence of experience relies on a distinction made by Hinton between our ordinary notion of experience and the philosophical notion of experience. Hinton has argued that such a distinction should be made and Byrne describes it as follows:

Ordinary talk of one's 'experiences' is talk of what happened to one, what one did, what one encountered or witnessed. Although this often concerns events, it is not talk of experiences in the special philosophical sense.<sup>12</sup>

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<sup>12</sup> Byrne 2009: 433, note 15.



Byrne argues that even though we have experiences in the ordinary sense of the word, this does not imply that we have experiences in the philosophical sense of the word and, in fact, there are no such experiences. What does Byrne mean by ‘experiences in the philosophical sense of the word’?

Byrne ascribes the distinction between the philosophical and ordinary sense of the word ‘experience’ to Hinton, though he indicates that his description of the ‘special philosophical notion’ differs from Hinton’s.<sup>13</sup> How does Byrne understand the philosophical notion of experience? Basically, Byrne sums up a number of aspects of the philosophical notion of experience and, although this does not amount to a very systematic description, I will list these aspects below. First, according to Byrne, if one hears as well as sees something, then, in the special philosophical sense, a distinction can be made between the visual and the auditory experience. The suggestion here is that, in daily life, we would not distinguish between an auditory and a visual experience if we were both seeing and hearing something. Second, according to Byrne, philosophical experiences are supposed to be particulars. Third, Byrne holds that philosophical experiences are supposed to be events.

Now, I grant that it might be the case that it is ‘philosophical’ rather than ‘ordinary’ to distinguish between different kinds of experiences and to wonder about their ontological structure. However, I do not think that, when one interprets the notion of experience in a philosophical way, that there is only one way to interpret it, namely as a particular and an event. One could easily interpret the notion of experience in a philosophical sense but hold that experiences are universals, or that they are property-instances, or yet something different. That is, I disagree with Byrne that the philosophical interpretation of the notion ‘experience’ commits one to experience falling into one ontological category rather than another. To be clear: I think that experiences might be particulars and they might be events, but I don’t think that interpreting the notion of experience in a philosophical sense implies this.<sup>14</sup>

In the next section of the paper Byrne provides another description of the distinction between the ordinary and philosophical concept of experience. Here is the passage:

Ordinary talk of one’s ‘experiences’ is talk of what happened to one, what one did, what one encountered or witnessed. Although often this concerns events, it is not talk of experiences in the special philosophical sense. If it were, then presumably an utterance of ‘I had the experience of seeing a galah for two minutes’ (equivalently, ‘I saw a galah

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<sup>13</sup> Hinton 1973.

<sup>14</sup> Cf. section 2.1.

for two minutes') would report the occurrence of a certain 'visual experience' lasting for two minutes. However, as Vendler pointed out, 'I saw a galah for two minutes', bears no grammatical hint of an event or process unfolding in time – unlike, say, 'I chased a galah for two minutes'.<sup>15</sup>

This passage helps to see better what Byrne takes to be the difference between the ordinary and philosophical sense of experience. In ordinary language 'experiences' refer to things one has done or things that have happened to one, such as: traveling in Asia, going to college, going to the movie, etc. Something as 'seeing a red ball for two minutes' would not often be called an experience in ordinary language, whereas it would be in a philosophical sense. Even though this seems right, I don't think it has much to do with whether or not experiences are considered to be events by the metaphysician. It seems, rather, that the individuation of experiences works according to different standards in ordinary versus philosophical language, or contexts. That is, in philosophy, experiences are generally taken to last for a short amount of time (the time it takes to look at a speckled hen, for instance) and any change in the visual field is, most often, considered to result in a change in the experience (shifting our eyes from the red to the orange paint chip, for instance). In ordinary life 'experiences' are usually taken to last longer and to survive many changes in properties. In this way 'traveling to Asia' can be said to be a good and interesting experience, even though 'the experience' is made up of millions of experiences in the philosophical sense.

Even though there is a difference here, I think the difference only makes sense. When one wants to study experiences, as one does in philosophy, one wants to focus on a simple, basic and small example, such as looking at a paint chip for two minutes. It also only makes sense that in an ordinary context of life one talks about 'experiences' as bigger events since life is constituted by these kinds of 'experiences'. Also, it seems that the latter kind of experiences do not bear a very complicated relation to the simple shorter kind. The experience of 'traveling to Asia' is just a composition of the million visual, auditory and other kinds of short simple experiences that one studies and describes in philosophy.

After introducing and describing the distinction between experiences in the ordinary sense and experiences in the philosophical sense, Byrne goes on to argue that experiences in the philosophical sense do not exist. Why does Byrne think that there are no experiences in the special philosophical

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<sup>15</sup> Byrne 2009: 433.

sense? Byrne's reason is that we don't see experiences, not if we look inwards (introspection), nor if we look outwards. I will discuss both of these claims, starting with the first.

Byrne's first claim is that we do not observe our experiences by introspection. The idea that is involved here is also called 'the transparency of experience', for example by Martin.<sup>16</sup> What is the transparency of experience? Here is Tye's description of the transparency thesis:

In turning one's mind inward to attend to the experience, one seems to end up concentrating on what is outside again, on external features and properties.<sup>17</sup>

Why are experiences considered to be transparent, by some philosophers? The reason is that, if we try to observe our experiences, we end up focusing on properties of the objects of our experiences; we cannot observe the experiences themselves. For example, you look out of the window and see a tree in front of the neighbor's house. Now instead of observing the tree in front of the neighbor's house, you want to observe your experience. What do you do? You look more closely at the tree, notice in more detail all its branches and leaves, etc. What else can you do? The idea of the transparency of experience is that, when we try to focus on our experience of a particular object, we end up focusing even more on the object of experience since we cannot observe our experiences themselves. Before presenting arguments against this claim, let's turn to the second claim.

Byrne's second claim is that we do not observe our experiences by looking outward. What does he mean by this second claim? Here is the passage where Byrne describes this phenomenon:

If I am undergoing the visual experience of a pig, then I can know that by attending to the pig. Fine. But why think I am undergoing a visual experience of a pig? (In the special philosophical sense of 'experience', this is not a prolix way of saying 'I see a pig'.) There are, of course, numerous events in the causal chain starting from the pig and continuing into my brain. If I am undergoing an experience of a pig, the experience is presumably to be found in that causal chain. But since the issue is whether I am undergoing an experience in the first place, this is of no help at all.<sup>18</sup>

I think Byrne's point in this passage should be understood as follows. Even though we seem to see things around us (when we are not unconscious, asleep,

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<sup>16</sup> Martin 2002.

<sup>17</sup> Tye 1995: 30.

<sup>18</sup> Byrne 2009: 434–5.

blind or have our eyes closed), it does not follow that we need to postulate a 'philosophical' entity such as 'visual experience'. That is, there certainly is a causal chain involving light rays, the pig, the workings of the eye and the brain (and doubtless many more physical processes), but there is not one entity in this chain that is 'the experience'. Despite the fact that we seem to have experiences in daily life, and despite the fact that we talk as if we do in ordinary language, strictly speaking there is no philosophical entity to be encountered when we look outward into the world of objects (of experience). I will discuss this second claim in more detail below and proffer an argument against it, but first I want to consider arguments that work against both the first and second claim.

The argument Byrne gives against the existence of experiences in a philosophical sense is that experiences are transparent; we don't observe our experiences, whether we look inside ourselves, or into the world. Now, I grant that you do not strictly speaking observe one particular entity in the causal chain that is 'the experience in the philosophical sense of the word'. However, there are a number of reasons to think that this does not mean that they don't exist: (i) for something to be visible is not identical to what it is for something to exist, and (ii) observation is not a good guide to existence (think of numbers, propositions). Even though that which we can observe often gets confused with that which exists, this is still based on confusion. There is no unbiased reason to assume that things that cannot be observed do not exist, or that there does not exist anything that we cannot observe. As a matter of fact, there are plenty of examples of things that we often take to exist that we cannot observe. Think of electrons or quarks, sound waves, love, the number 2, etc. If one would want to insist that things that we cannot observe do not exist, then, certainly, arguments for this thesis should be given. However, arguments against it are manifold. Until this matter is settled, the thesis cannot be used as an argument for the further thesis that experiences do not exist because we cannot observe them.

So, it seems that the fact that we cannot observe experiences is not a good argument against their existence. I would like to add that, on top of that, there is a different way in which we do observe our experiences. Even though we do not observe our experiences in introspection, and we don't observe them in the same way that we observe e.g. a tree, we certainly know of and about our experiences. That is, even though I do not observe my experience in the way that I observe a tree, and, even though we should maybe say that I don't observe them at all, I do have knowledge of, or acquaintance with, my experience. I know that I have the experience, first of all, and I know what the experience of seeing a tree is like (and not just what the tree is like). Similarly,

I know that I am not unconscious, I know whether or not I have a headache, I know that my knee itches, I know that I enjoy my experience of the sunlight shining on the trees outside, I know that particular experiences make me feel bad, good, etc.

Since the fact that we cannot observe experiences is not a reason to think that they do not exist, in conjunction with the idea that we seem to have knowledge of our own experiences, it seems that there is a different mode of observation (if we should call it 'observation' at all) when it concerns our experiences. Let's call it 'acquaintance'.<sup>19</sup> Just like we know what mood we are in, even though moods are not observable, we know whether or not we have certain experiences, what they are of and what they are like. The fact that we have this kind of epistemic access to them seems to suggest that they do exist; we might not observe them, but we have them and we are acquainted with them. Possibly 'acquaintance' is the sort of relation we can stand in to experience and possibly this relation is an alternative, cognitive form of introspection.

A second objection against Byrne's argument is that it is supposed to be an argument against the philosophical sense of experience, not against the ordinary sense of experience. Now, it seems to me that the argument that we cannot observe experiences would, if anything (i.e. if it would be a good argument at all), be an argument against the ordinary sense of experience. Why? Well, the argument is based on an ordinary experience: when you try to focus on features of your experience, you end up focusing more on the (features of the) object of your experience. Maybe in ordinary contexts people do not tend to try this, but ironically, it *is* an observation from ordinary experience and not e.g. a theoretical argument against the existence of events. As such, it is not a very good argument against the *philosophical* sense of experience. It only would be if everything that seems to be the case, is the case, but, as we all know too well, it does not need to be the case that everything that seems a certain way *is* that way – ultimately, in a philosophical sense. In this case, the fact that we do not observe experiences and they do not seem any way at all to us does not mean that they don't exist. The whole reason why we do philosophy is because things are not always what or how they seem. Therefore, this is not a good argument against the philosophical sense of experience.

On top of this, if this would have been a good argument against the philosophical sense of experience, it would have been as good of an argument

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<sup>19</sup> I am following Feigl in calling the epistemological relation of direct epistemic access that we stand in to our experiences 'acquaintance'. More on this in Chapter 5.

against the ordinary sense of experience. After all, if the argument were to go through, we would not observe our experiences full stop. That is, we would not observe experiences in the philosophical sense but also not in the ordinary sense. That would mean that experiences in the ordinary sense would not exist either according to this argument. However, Byrne does not want to say that our ordinary experiences do not exist, which means that the argument is too strong for its own good.

A third objection against Byrne's argument is that experiences do not exist like tables and chairs, i.e. like objects of our experiences, but they don't have to be the kinds of things that we can observe in the same way. There are other reasons that can lead us to conclude that they exist. In this way there is an analogy between the case of experiences and the case of universals: universals cannot be observed by looking inside or outside ourselves, universals don't exist like tables and chairs and they are odd objects, but we need them to do work for us. In the same way we might need experiences to do work for us. It seems odd that Byrne would hold it against experiences that they are not readily observable like tables and chairs, especially since he argued earlier that experiences in the philosophical sense, despite the fact that they don't exist, are events. Now, (some) events might be observable, but not as easily as a table or chair. For example, take an election and try to observe it. It is not clear if you even can observe an election. Surely, you can observe people voting, the polls, and you can even observe the results, but do you thereby observe an election? In any case, events are not as easy to observe as medium-sized dry goods.

One reason why Byrne's second claim seems to have some intuitive power, I think, is because it seems like he is there arguing against the postulation (or existence) of sense data. He seems to assume that experiences are mysterious entities similar (or identical) to sense data. However, even though we observe objects of experiences, it does not follow that there are sense data that are involved in this process. If this is what Byrne is arguing then I agree with him. However, it does not seem to me that the only interpretation of 'experiences' is the one according to which experiences are sense data and, interestingly, this is not Byrne's interpretation of experiences in the philosophical sense either.

In this section, we have seen two arguments against the existence of experience. The first is an argument from awkwardness and the second is Byrne's argument. Byrne is willing to grant that it seems as if we have experiences but, according to Byrne, they don't exist in a philosophical sense because we cannot observe them. As I have shown, these are both not very good arguments against the existence of experience. Now let's turn to an argument in favor of the existence of experience.

## 2.3 PRO: AN ARGUMENT FOR THE EXISTENCE OF EXPERIENCE

The question of this chapter is whether experiences exist. On the one hand there are arguments for the claim that experiences are mere illusions, such as we have seen in the previous section. On the other hand, it certainly *seems* to us that we are conscious and have experiences and it's hard to imagine this is not the case, moreover to know what this would even mean. It seems that people have experiences and it seems to follow from the fact that people have experiences that experiences exist. But does it really follow that experiences exist? In general, how can we tell if a sentence entails that certain things exist?

A popular and widely accepted method for answering questions exactly like these is Quine's criterion of ontological commitment, which is part of his metaontology.<sup>20</sup> A prominent contemporary defender of Quine's criterion of ontological commitment is Van Inwagen, who has used this criterion to answer, among other things, the question whether or not properties exist. Let's look at Van Inwagen's exposition of Quine's metaontology, a clear explanation of which appears in his paper "A Theory of Properties" and in the chapter "Meta-ontology" in his book *Ontology, Identity, and Modality*.<sup>21</sup> In the former, Van Inwagen says that: 'According to Quine, the problem of deciding what to believe about what there is is a very straightforward special case of the problem of deciding what to believe.'<sup>22</sup> Now, how do we decide to believe anything?

The answer Quine's metaontology offers for answering this question is that we should look at the true propositions that we already sincerely believe, or seriously endorse, and see if they, when translated into so-called 'canonical notation', commit us to there being entities which are bound by the existential quantifier.<sup>23</sup> Now the following is not an example about properties, but just a very basic example of how a sentence can commit us to the existence of those entities over which the sentence quantifies. For example, suppose I sincerely believe that 'There are barking dogs, which keep me up at night'. This sentence in canonical notation is: 'At least one thing is such that it is a dog and it barks and it keeps me up at night.' The purpose of translating a sentence of natural language into canonical notation is that inference rules of first order logic can be applied to such sentences.<sup>24</sup> Since in this sentence 'dogs' are bound by the

<sup>20</sup> This term was coined by Van Inwagen 2001.

<sup>21</sup> Van Inwagen 2004 and Van Inwagen 2001.

<sup>22</sup> Van Inwagen 2004: 114.

<sup>23</sup> See Van Inwagen 2009 for a full account and explanation of canonical notation.

<sup>24</sup> I take this point from Van Inwagen: 'The justification of this regimentation lies in one fact: the rules of quantifier logic, a simple set of rules that captures an astonishingly wide range

existential quantifier, which is to say that this sentence quantifies over dogs, by endorsing this sentence I am thereby committed to the existence of dogs.

Van Inwagen uses Quine's metaontology to argue for the conclusion that properties exist. He starts out from the claim that there are true sentences like the following that, when translated into canonical notation, quantify over properties: 'Spiders share some of the anatomical features of insects.'<sup>25</sup> How does this sentence get translated into first order logic? Van Inwagen:

We find that what it says is this:

There are anatomical features that insects have and spiders also have.

Or in the "canonical language of quantification",

It is true of at least one thing that it is such that it is an anatomical feature and insects have it and spiders also have it.<sup>26</sup>

Since this sentence, translated into canonical notation, quantifies over 'anatomical features', this means, according to Quine's metaontology, that if someone sincerely endorses this sentence, they are committed to the existence of anatomical features and so, to the existence of properties. In Van Inwagen's words again:

It is a straightforward logical consequence of this proposition that there are anatomical features: if there are anatomical features that insects have and spiders also have, then there are anatomical features that insects have; if there are anatomical features that insects have, then there are anatomical features – full stop.<sup>27</sup>

More generally, this is how Van Inwagen describes the strategy for using Quine's criterion of ontological commitment:

The strategy is this: one takes sentences that the other party to the conversation accepts, and by whatever dialectical devices one can muster, one gets him to introduce more and more quantifiers and variables into those sentences. (...) If, at a certain point in this procedure, it emerges that the existential generalization on a certain open sentence F can be formally deduced from the sentences he accepts, one has shown that the

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of valid inference (...), can be applied to sentences in the regimented language.' 2009: 496-7.

<sup>25</sup> Van Inwagen 2004: 114.

<sup>26</sup> Ibid.

<sup>27</sup> Ibid.: 115.



sentences that he accepts, and the ways of introducing quantifiers and variables into those sentences that he has endorsed, formally commit him to there being things that satisfy F.<sup>28</sup>

And here is how Quine puts it himself:

We are convicted of a particular ontological presupposition if, and only if, the alleged presuppositum has to be reckoned among the entities over which our variables range in order to render one of our affirmations true.<sup>29</sup>

An entity is assumed by a theory if and only if it must be counted among the values of the variables in order that the statements affirmed in the theory be true.<sup>30</sup>

Before looking at different avenues, a nominalist – who believes that universals don't exist – might take in response, it is worth looking at the plausibility of Quine's metaontology. Is this a good method to determine which things exist? In order to answer this question we'll have to look at the assumptions of this view. The first assumption is that many sentences can be translated in canonical notation without changing the meaning of these sentences. It is not necessary that all sentences are so translatable, but many should be. With respect to this, Van Inwagen gives the argument that we can get canonical notation out of ordinary English sentences by means of adding operators and replacing names with variables. These operators (quantifiers) and variables should be understood as abbreviations of English phrases.<sup>31</sup> Since we are especially interested in the existential quantifier in this section (since we want to know how to decide which things exist), what can we say about the relation between an ordinary English phrase and a phrase using a quantifier? Van Inwagen writes:

The meaning of the quantifiers is given by the phrases of English – or of some other natural language – that they abbreviate.<sup>32</sup>

And:

It will be clear that the quantifiers so introduced are simply a regimentation of the “all” and “there are” of ordinary English.<sup>33</sup>

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<sup>28</sup> Van Inwagen 2001: 28.

<sup>29</sup> Quine 1953: 13.

<sup>30</sup> Ibid.: 103.

<sup>31</sup> Or phrases of any other natural language.

<sup>32</sup> Van Inwagen 2001: 21.

<sup>33</sup> Ibid.: 19.

This first assumption seems reasonable: many sentences in ordinary English can be translated into canonical notation by the introduction of variables and operators.

The second assumption of this view is that being is the same as existence. These days, this is a widely held and accepted view.<sup>34</sup> To deny this thesis makes one a Meinongian. Meinongians distinguish between being and existence, which leads them to affirm that there are things that do not exist – a claim that Meinongians are infamous for defending. Since it is hard to understand what it would mean for there to be things that don't exist, I take it that this second assumption can be accepted without much trouble.

The third assumption of this view is that being is univocal and that existence, which on this view is the same as being, is also univocal. Even though this is now a widely held and accepted view,<sup>35</sup> the thesis that existence is equivocal has at different times and in different ways been defended.<sup>36</sup> Heidegger, for example, was a philosopher who thought that what it means for material objects to exist means something different than what it means for minds or consciousness to exist. And Sartre held that there are two kinds of being, being-for-itself and being-in-itself. Now, the thesis that existence is equivocal is not very appealing. As mentioned before, most contemporary analytic philosophers do not make a distinction between existence and being and think existence and being are the same thing. However, what most philosophers believe could just be the whim of fashion. How can one argue for the thesis that existence is univocal? Van Inwagen has offered such an argument:

No one would be inclined to suppose that number-words like “six” or “forty-three” mean different things when they are used to count different sorts of object. The very essence of the applicability of arithmetic is that numbers may count anything: if you have written thirteen epics and I own thirteen cats, then the number of your epics is the number of my cats. But existence is closely tied to number. To say that unicorns do not exist is to say something very much like saying that the number of unicorns is 0; to say that horses exist is to say that the number of horses is 1 or more. And to say that angels or ideas or prime numbers exist is to say that the number of angels, or of ideas, or of prime numbers, is greater than 0. The univocity of number and the intimate connection between number and existence should convince us that there is at least very good reason to think that existence is univocal.<sup>37</sup>

<sup>34</sup> Although not all analytic philosophers believe this. For example Parsons (1980) thinks that there are non-existent objects.

<sup>35</sup> Held and accepted by most, if not all, analytic philosophers.

<sup>36</sup> By among others, Sartre, Heidegger, Ryle (1949).

<sup>37</sup> Van Inwagen 2001: 17.

This argument is convincing. Put more strongly: it's hard to see how one can defend that existence is equivocal such that one does not contradict oneself. The third assumption stands.

The fourth assumption of this view is that there are no multiple existential quantifiers, but that there is only one existential quantifier, which adequately captures existence (and also being, since that is the same on this view). It has sometimes been argued that there are several existential quantifiers, e.g. Carnap is sometimes interpreted this way. For example, Gallois thinks that Carnap holds that existence statements are not absolutely true but only ever true relative to a certain framework.<sup>38</sup> Also Hirsch and Putnam are often called 'ontological pluralists'.<sup>39</sup> Here is a description of ontological pluralism:

There are a number of different languages we could speak, such that (a) different existence sentences come out true in these languages, due to the fact that the ontological expressions (counterparts of "there is", "exists", etc.) in these languages express different concepts of existence and (b) these languages can somehow describe the world's facts equally well (...).<sup>40</sup>

I will very briefly discuss Putnam's 'ontological pluralism', which he calls 'conceptual relativity'. According to this conceptual relativity, it is relative to our concepts which things we think exist. In a world with objects  $x_1$ ,  $x_2$  and  $3x$ , a realist will hold that there exist three objects, a believer in mereological sums will hold that there exist seven objects, and Van Inwagen, assuming that  $x_1$ ,  $x_2$  and  $x_3$  are material objects, will think there exist zero objects. The existential quantifier is thus restricted and relative to a certain domain (which is constituted by e.g. language, concepts, ontological convictions). We cannot say of the above world how many objects there are simpliciter; there is not one existential quantifier.

Even though there is something appealing about this view, it is not very plausible. That is, even though it seems plausible that our concepts shape our world to a certain extent, this does not necessarily imply that we should think that there is more than one existential quantifier. Moreover, things get very complicated and problematic were we to accept this. The assumption that there is one existential quantifier is thus secure.

Given these assumptions, this view is very plausible. After all, if the assumptions are true, then the following is a good argument: If we can translate

<sup>38</sup> Eklund 1998. However, not all interpreters of Carnap agree with Gallois on this point.

<sup>39</sup> Ibid.: 137. Eklund mentions that Hirsch and Putnam are sometimes even called "neo-Carnapians".

<sup>40</sup> Ibid.

a true sentence into canonical notation, then that which is bound by a variable, exists. And since to quantify over something is to say it exists, a person cannot express a sentence such as 'spiders share some of the anatomical features of insects' and say that anatomical features do not exist without contradicting himself.

Now, these things said, if we accept Quine's criterion of ontological commitment, what avenues are open to the nominalist in this case? Van Inwagen explains that there are four options, which I will paraphrase below:

1. To become a Platonist, id est: giving up the nominalist's position.
2. To declare the sentence 'spiders share some of the anatomical features of insects' to be false.
3. To deny that it follows from the sentence 'spiders share some of the anatomical features of insects' that there are such things as anatomical features.
4. To declare the inconsistency between the sentence 'spiders share some of the anatomical features of insects' and the non-existence of anatomical features is apparent, not real, even though he or she cannot point out what is wrong with it.<sup>41</sup>

I will discuss these options briefly. Naturally, the first option is not so attractive for a nominalist, and neither is the fourth. The second option is a little more attractive than the first and fourth but is not that attractive in itself. Van Inwagen gives two reasons why it isn't:

First it seems to be a simple fact of biology that spiders share some of the anatomical features of insects. Secondly, there are many, many simple facts that could have been used as the premise of an essentially identical argument for the conclusion that there are properties.<sup>42</sup>

The nominalist is therefore not only supposed to explain that the sentence about spiders and insects is false, but, for that matter, that all sentences that quantify over properties are false.

With the third option the nominalist seems to have a better shot. This is the option of paraphrase: the nominalist can claim that it does not follow from the sentence 'spiders share some of the anatomical features of insects' that there are such things as anatomical features, because the sentence can be paraphrased such that it does not quantify over anatomical features. If

<sup>41</sup> Paraphrased from Van Inwagen 2004: 115.

<sup>42</sup> Ibid.: 115-6.

this paraphrase does not quantify over anatomical features, then we are not committed to there being such things. It would then merely be apparent that the sentence ‘spiders share some of the anatomical features of insects’ implies that there are such things as anatomical features, but this would not be a real implication. Even though it might be hard or impossible to find such a paraphrase, at least this option has a better chance than the other three.

Let’s now turn from properties to experience.<sup>43</sup> Are there sentences that we all take to be *prima facie* literally true and that we sincerely endorse but that quantify over experiences? Yes, there are such sentences. For example: ‘Jack and Jill have the same experience’, ‘My experience of college is very different from yours’, ‘This was a strange experience’, etc. Our ordinary language is full of sentences which, when translated into canonical notation, quantify over experiences. Also, in scientific contexts, sentences are used which quantify over experiences. For example, psychologists use sentences that compare people’s experiences, or compare different experiences of one subject at different times. For now I will take the first sentence as the paradigm case of a sentence that quantifies over experiences.

(1) Jack and Jill have the same experience.

I’m picking this sentence for the following reasons: (i) it clearly quantifies over experiences, and (ii) it is similar in structure to the sentence that Van Inwagen uses in his argument for the existence of properties, which means that Van Inwagen’s model applies to our case very well.

How can we argue for the existence of experiences based on our paradigm sentence? Well, the sentence ‘Jack and Jill have the same experience’ entails that there are experiences, because the standard translation of this sentence into canonical notation is:

(2) There exists an  $x$  such that  $x$  is an experience and Jack has  $x$  and Jill has  $x$ .

The problem with this sentence is that when we say that Jack and Jill have the same experience we don’t intend to say that Jack and Jill literally have something in common, which is what is expressed by the sentence. More

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<sup>43</sup> It is worth noting here that Quine himself was a behaviorist and not a sympathizer of ‘experiences’. However, Quinean metaontology as a method is independent of this fact and can still be used to determine whether experiences exist.

precisely, we intend to say that Jack and Jill have (token) experiences of the same type. The modified sentence in canonical notation then becomes:

- (3) There exists an  $x$  and there exists a  $y$ , such that  $x$  is an experience and  $y$  is an experience, and Jack has  $x$ , and Jill has  $y$ , and  $x$  and  $y$  are of the same type.

This sentence entails that there are such things as experiences, in particular token experiences: the kinds of things that Jack and Jill each have, but which cannot be had in common.

However, one might think that one can paraphrase this sentence such that it does not quantify over experiences. How could one do this? One could try to paraphrase this sentence, so as not to quantify over experiences, as follows:

- (4) There exists an  $x$  such that  $x$  is an event and Jack experienced  $x$  and Jill experienced  $x$ .

The idea here is that we can paraphrase sentences that talk about experiences in terms of sentences that talk about events. The result of this paraphrase, if it is a good and accurate paraphrase, is that someone who believes it does not have to be committed to the existence of experiences. All they are committed to is the existence of Jack, Jill and events or activities (and maybe types of events or types of activities, but I will leave this out of account). However, this sort of paraphrase is open to counterexamples; I will discuss two such counterexamples.

The first counterexample is the possibility of a case of hallucination. Take a case where Jack and Jill both have the experience of eating ice cream. Jack and Jill have token experiences of the same type, but Jack really is eating ice cream, while Jill is deceived by an evil demon (or she is a brain-in-a-vat) and is *de facto* not eating ice cream at all. In this case, sentence (1) is true, but paraphrase (4) is false. So a simple case of hallucination is enough to show that this sort of paraphrase fails. However, there is an easy solution to this particular problem, namely to take a disjunctivist view. According to a disjunctivist view, if Jack and Jill have the same experiences, Jack and Jill are either undergoing the same event, or one of them (or even both of them) are hallucinating. The paraphrase in terms of events can thus be saved in this way by disjunctivism. However, there is also a more mundane counterexample against this kind of paraphrase that does not involve hallucination.

The second counterexample to paraphrase (4) is that for two people to undergo the same event is not sufficient for them to have experiences of the

same type. Let me explain. Suppose Jack and Jill witness someone dropping a cocktail glass at a party. Surely this is a single event – and since any event is of the same type as itself, Jack and Jill are witnessing events of the same type, i.e. the same event(s). Nevertheless, Jack and Jill's experiences of this event might be very different, such that we would be inclined to say, in ordinary language, that they did not have the same experience, or in other words, that they did not have experiences of the same type. For example, their relative positions with respect to the shattering glass and the different lighting might have made a difference in Jack and Jill's experience such that Jack saw a beautiful reflection of light in the shattering glass, whereas Jill didn't at all. Jack's experience of the shattering glass would then have been aesthetically pleasing, whereas Jill's wasn't. There might be other differences between their respective experiences, but I will confine myself to the differences in visual phenomenology and only the part of their visual phenomenology that seems relevant.<sup>44</sup> The fact that Jack and Jill have different experiences of the same event means that, if you try to paraphrase experiences in terms of events, the paraphrase fails. The issue is that events aren't fine-grained enough: people can experience the same event, yet not have the same experience(s). Experiencing the same event is thus not sufficient for having the same experience. In the counterexample sketched above, paraphrase (4) does not have the same truth conditions as sentence (1) of which it is supposed to be a paraphrase. But if the truth conditions come apart, then (4) cannot be said to be an accurate paraphrase of (1).

Now, one could object that if Jack and Jill do not have the same experience, then no one ever has the same experience as another person and our original sentence 'Jack and Jill had the same experience' is simply false. But this is not true. There are cases in which people have experiences of the same type, for example if Jack and Jill have a sufficiently similar physiology, had been standing right next to each other and the lightning would have hit the glass in the exact same fashion, and so on.

There are two kinds of replies someone defending paraphrase in terms of events could offer to this objection. The first kind of reply to this objection consists in simply claiming that sentence (1) is false. In this case no paraphrase would be necessary, since a false sentence does not commit one to anything. But why would sentence (1) be false? The defender of paraphrase in favor of events could claim that this sentence is false because all very general sentences

<sup>44</sup> There are other differences in visual phenomenology between Jack and Jill's experiences, for example, the door is to the left of the shattering glass for Jack and to the right for Jill, but these sorts of differences are not relevant here. I am here focusing on the visual experience of the shattering glass.

about experiences, which do not specify which experiences they exactly involve, are false. Since sentence (1) is a very general sentence about experience, it is false. However, if one were to specify which experience Jack and Jill both have, the sentence expressing that could be true. Take the following sentence:

(5) Jack and Jill have the same experience of eating ice cream.

This sentence could be true (i.e. it *is* true if Jack and Jill indeed have the same experience of eating ice cream) and it could be paraphrased successfully. The problem with this option however, is that there does not seem to be any principled reason why we should say that general sentences about experiences are false, while sentences that specify which experiences exactly are involved are true – except for the reason that, then, one could also paraphrase general sentences about experiences, which would be a totally ad hoc and therefore unacceptable reason.

The second kind of reply is that I might have misrepresented the position of the defender of paraphrase in terms of events. Maybe the events over which these paraphrases quantify are not physical events, but mental events. In that case, the event that we should use in paraphrases is not, for example, ‘the shattering of the glass’, but instead Jack or Jill’s ‘seeing the glass shatter’. Jack’s ‘seeing the glass shatter’ and Jill’s ‘seeing the glass shatter’ are (or aren’t) events of the same type. A paraphrase in terms of mental events avoids the counterexamples we have presented. There is a big objection against this interpretation though, which we can express by the following question: What are these ‘seeings’? It seems that ‘seeings’ are experiences by another name and by using this term experiences are reintroduced through the back door.

Paraphrasing sentences about experiences in terms of events is thus problematic. The person who yet wants to deny that there are experiences obviously has the same options that Van Inwagen allows for the nominalist. Let’s consider the first and the fourth options first. The first option is to convert, give up on the denial of the existence of experience and affirm that experiences exist. This is presumably not such an appealing option for the experience-denying philosopher. The fourth option is to declare that the inconsistency between the sentence ‘spiders share some of the anatomical features of insects’ and the claim that there are no such things as anatomical features is merely apparent without being able to say how and why exactly it is not real. Van Inwagen says about this option: ‘always an option, but no philosopher is likely to embrace it except as a last resort.’<sup>45</sup>

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<sup>45</sup> Van Inwagen 2004: 116.



What about the second and third option? The second option is to declare the proffered sentence false; the third option is to find a paraphrase for the sentence that is not ontologically committing. Now, interestingly, one can see eliminativism and behaviorism, respectively, as precisely such attempts. According to eliminativism, folk psychological sentences, such as the sentences we have seen about experiences, are false and mental concepts should be eliminated. According to behaviorism, mental terms should be replaced by behavioral terms to achieve a paraphrase that does not commit one to there being the things to which mental terms would refer. In the next two sections, I will discuss both these options and see if they provide the naturalist with a way out of the ontological commitment to experiences.

We have just seen that simply paraphrasing sentences about experiences in terms of events does not work, but a different paraphrase strategy, such as behaviorism, might work. Behaviorism as a paraphrase strategy is worth discussing since it is a prominent movement that has tried to give paraphrases of these sorts of sentences, and it is more involved and sophisticated than the paraphrase strategy we discussed in this section.

## 2.4 FIRST REPLY: BEHAVIORISM

In section 2.2 we already discussed arguments for the claim that there are no experiences. In this section and the next section, we will discuss replies to the argument from the previous section that there are experiences. Even though the arguments from this and the next section are also arguments for the conclusion that there are no experiences (just as the arguments in section 2.2), these are arguments against an argument for the existence of experiences.

As we have just established, there are only two respectable ways to avoid the result of the application of Quine's methodology, which means that there are two replies to it:

1. To say that ordinary claims should be paraphrased so as not to quantify over experiences, which is what the theory of behaviorism aims to do.
2. To say that ordinary claims, in which we quantify over experiences, are false, which is attempted by eliminativism.

In this section I will discuss the first of these two options, which is the paraphrase strategy we can find in behaviorism and see if it presents the experience-denying philosopher with a good reply against Quine's metaontology.

What is behaviorism exactly? To start answering this question, let's first look at the following description of behaviorism from Graham:

Behaviorism, the doctrine, is committed in its fullest and most complete sense to the truth of the following three sets of claims.

1. Psychology is the science of behavior. Psychology is not the science of mind.
2. Behavior can be described and explained without making reference to mental events or to internal psychological processes. The sources of behavior are external (in the environment), not internal (in the mind).
3. In the course of theory development in psychology, if, somehow, mental terms or concepts are deployed in describing or explaining behavior, then either (a) these terms or concepts should be eliminated and replaced by behavioral terms or (b) they can and should be translated or paraphrased into behavioral concepts.<sup>46</sup>

For our purposes, the third assumption is the most important. Unfortunately, this passage is at the same time a little confusing, since there does not seem to be a principled difference between (a) and (b): in case of (a) the mental terms should be eliminated and replaced by behavioral terms and in case of (b) the mental terms should be translated and paraphrased into behavioral terms.<sup>47</sup> Now, replacing, translating and paraphrasing are not the same verbs, but the result for the mental terms is the same: they will not be part of the newly constructed sentence.

Philosophical behaviorism thus does not present a positive theory with regard to mental states; it is rather a theory about the language we use to talk about mental states. More specifically, behaviorism is a theory that aims to replace all reference to experience and mental states with behavioral references. Sentences containing mental concepts will thus need to be paraphrased such that the paraphrase does not contain any 'mental concepts'.<sup>48</sup> If this could be done for all sentences, then this would show that we are not committed to the existence of mental concepts. It should be noted that behaviorism is a theory about language and is, as such, in theory, compatible with ontological

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<sup>46</sup> Graham 2007.

<sup>47</sup> Since the term 'elimination' is used here, the question is raised how eliminativism and behaviorism relate to one another. In both eliminativism and behaviorism mental concepts are eliminated. In the case of behaviorism, however, this happens by translating or paraphrasing these concepts into other concepts, which is a crucial interest for the behaviorist. After all, the behaviorist does not simply think that mental concepts should be eliminated, but that anything usually called 'mental' can be explained in behavioristic terms. The eliminativist would be satisfied with and aims for elimination simpliciter – since he thinks that mental concepts do not refer at all, not even to behavior.

<sup>48</sup> I'm using the term 'mental concept' for any concept that refers to a mental state.

dualism. Not that there are (m)any behaviorists who are dualists, but it should be kept in mind that even if we could do without mental concepts, this does not necessarily imply that there are no mental things; it just means that if we wanted to speak as if they were non-existent (for some other reason), at least we could do so in a coherent way, and in a way in which our ordinary talk is not rendered false. But what would this mean for our ordinary language, in which we use mental concepts? This is Churchland's answer to that question:

[T]alk about emotions and sensations and beliefs and desires is not talk about ghostly inner episodes, but is rather a shorthand way of talking about actual and potential patterns of behavior.<sup>49</sup>

Here is how Graham puts the same idea in different words:

Don't human beings talk of introspectible entities even if these are not recognized by behaviorism? Psychological behaviorists regard the practice of talking about one's own states of mind, and of introspectively reporting those states, as potentially useful data in psychological experiments, but as not presupposing the metaphysical subjectivity or non-physical presence of those states. There are different sorts of causes behind introspective reports, and psychological behaviorists take these to be amenable to behavioral analysis.<sup>50</sup>

So, mental concepts do not (need to) refer to mental entities. Mental concepts can and should be paraphrased away, so that it is clear that there is no ontological commitment there. In Churchland's terms:

Philosophical behaviorism claims that any sentence about a mental state can be paraphrased, without loss of meaning, into a long and complex sentence about what observable behavior would result if the person in question were in this, that or the other observable circumstance.<sup>51</sup>

Since it is hard to see how this can be done in the abstract, I proffer we look in detail at an example that Churchland gives of this sort of paraphrase. Churchland, himself by the way no friend of behaviorism, provides us with a helpful analogy to understand what is involved in such a paraphrase. The analogous case is the dispositional property of 'being soluble' that a sugar cube

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<sup>49</sup> Churchland 1994: 23.

<sup>50</sup> Graham 2007.

<sup>51</sup> Churchland 1994: 23.

has. As Churchland explains: 'To say that a sugar cube is soluble is not to say that the sugar cube enjoys some ghostly inner state. It is just to say that if the sugar cube were put in water, then it would dissolve.'<sup>52</sup>

Knowing this, how would this kind of paraphrase for mental concepts work? Churchland argues that paraphrases for mental concepts are, in fact, at least apparently, analogous to the soluble sugar cube case. He analyses the mental state 'wants a Caribbean holiday'. According to Churchland to say that Anne wants a Caribbean holiday is to say that:

1. If asked whether that is what she wants, she would answer yes, and
2. If given new holiday brochures for Jamaica and Japan, she would peruse the ones for Jamaica first, and
3. If given a ticket on this Friday's flight to Jamaica, she would go, and so on.<sup>53</sup>

The paraphrase for 'Anne wants a Caribbean holiday' thus consists of the conjunction of all these claims. There are examples of mental concepts that are easier to analyze in this way than others; if someone is sad and crying, for example, the behaviorist has an easy time. However, if someone is merely having 'an orange sensation', then the behaviorist is limited to the answers given to questions he asks.

Even though it seems at least kind of promising that behaviorists have something to offer when it comes to finding a paraphrase for these kinds of mental states that do not come with clearly observable behavior, there are still three big problems with this kind of paraphrase that are problems for behaviorism in general.

The first big problem is that such paraphrases ignore the inner aspect of mental states or the inner aspect of the reference of mental concepts. Churchland has formulated this criticism in the following way:

To have a pain, for example, seems to be not merely a matter of being inclined to moan, to wince, to take aspirin, and so on. Pains also have an intrinsic qualitative nature (a horrible one) that is revealed in introspection, and any theory of mind that ignores or denies such qualia is simply derelict in its duty.<sup>54</sup>

To a certain extent, this 'supposed' problem could be said to beg the question. However, I am not sure matters are that easy for the behaviorist. There is

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<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> Ibid: 24.

something disturbing about the idea that the intrinsic quality of mental states, such as feelings of pain, could simply be ignored and left out of account.<sup>55</sup>

The second big problem with this kind of paraphrase, and so with behaviorism in general, appears when the details of the necessary paraphrases are considered. Even though we have seen the kind of paraphrase that could be given for the mental state 'wants a Caribbean holiday', this paraphrase merely approaches or indicates the sort of paraphrase that is needed but is itself not sufficient to count as a successful paraphrase. Why not? Well, the paraphrase is a conjunction of conditionals, but these conditionals are not all sound and, in turn, all need to be qualified. Churchland has recognized this of his own example. Here is how he formulates the problem:

Supposing that Anne does want a Caribbean holiday, conditional 1 above will be true only if she isn't secretive about her holiday fantasies; conditional 2 will be true only if she isn't already bored with the Jamaica brochures; conditional 3 will be true only if she doesn't believe the Friday flight will be hijacked, and so forth. But to repair each conditional by adding in the relevant qualification would be to reintroduce a series of mental elements into the business end of the definition, and we would no longer be defining the mental solely in terms of publicly observable circumstances and behavior.<sup>56</sup>

Not only are mental concepts reintroduced through the back door, this difficulty also means that the paraphrases are endlessly long. This creates a further problem, since, to cover all qualifications of the conditionals, the paraphrases might be infinitely long or indeterminately long. In Churchland's words:

The list of conditionals necessary for an adequate analysis of 'wants a Caribbean holiday', for example, seemed not just to be long, but to be indefinitely or even infinitely long, with no finite way of specifying the elements to be included. And no term can be well-defined whose definiens is open-ended and unspecific in this way. Further, each conditional of the long analysis was suspect on its own.<sup>57</sup>

If the first problem with paraphrase was relatively easy for the behaviorist to reply to, this second problem seems more serious and very hard to avoid. After all, the whole theory hangs on the possibility of paraphrasing mental concepts and the theory is as good as the paraphrases it can offer. However, if there are

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<sup>55</sup> Naturally, the behaviorist will deny that anything is left out of account. However, they still haven't shown how they can account for the intrinsic quality of mental states.

<sup>56</sup> Churchland 1994: 24.

<sup>57</sup> Ibid.

principled problems with paraphrase, and it seems unlikely that paraphrase can be successful in this way, then there is not much left of behaviorism.

A behaviorist might defend himself by claiming that these issues with paraphrase are merely practical yet not principled problems. However, if it is unlikely that accurate paraphrases can be given, the plausibility of this view is seriously challenged. Granted, it is possible that someday the sought-after paraphrases will be found, in which case we have to revise our verdict of behaviorism, but, until that day, it cannot be assumed that the necessary paraphrases can or will be provided. Behaviorism, as a paraphrase strategy, is thus not successful.

## 2.5 SECOND REPLY: ELIMINATIVISM

Following Van Inwagen's model, we established four avenues the naturalist, who wants to deny that there are such things as experiences, can take. Two of those had to be rejected right away, and the third paraphrase-option had to be rejected in the previous section. This means that there is one possible rejoinder for Quine's metaontology left, which is to say that ordinary claims, in which we quantify over experiences, are simply false. Eliminativism, or eliminative materialism, can be seen as exactly such an attempt.

What is eliminative materialism? Contemporary eliminative materialism, eliminativism for short, is the doctrine that common sense or folk psychology is radically false and that some or all of the mental states that we ordinarily assume to exist, do not exist. Here is how Churchland, a famous eliminativist himself, describes the position of eliminativism: 'Our common-sense psychological framework is a false and radically misleading conception of the causes of human behavior and the nature of cognitive activity.'<sup>58</sup>

There are two different ways in which eliminativism has been spelled out. The first is in line with Broad's early idea that mental attributes, in fact, have no reference. The reference category will thus turn out to be empty on this view. The second way in which eliminativism can be spelled out is as the view that the conceptual framework that future physics will propose will replace the common sense conceptual framework that we have now. Ramsey writes about these two ways of being an eliminativist: 'Given these two different conceptions, early eliminativists would sometimes offer two different characterizations of their view: (a) *There are no mental states, just brain states* and, (b)

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<sup>58</sup> Ibid.: 43.

*There really are mental states, but they are just brain states (and we will come to view them that way).*<sup>59</sup>

Eliminativism knows parallels that can be found in scientific history. More than once something that was thought to exist by the lights of an older theory was eliminated when a newer theory was introduced that could do without it – and that was better. Think of moods, which were thought to be different kinds of fluids in body, such as black (gal), yellow (gal), etc. In *Mind and Consciousness*, Churchland discusses some other examples. He mentions, for example, how heat was thought to be a fluid held in bodies called ‘caloric’, until it turned out that heat is not a substance.<sup>60</sup> The difference between these cases and the case of eliminative materialism is that, at least so far, the other new theories have been proven to be accurate and whether eliminative materialism is accurate remains yet to be seen.

Now, how does eliminativism deny that there are experiences? Eliminativism denies every common sense or folk notion of the mental, including the idea that we have experiences and that experiences have phenomenal character. One way to say these ordinary sentences are false is by saying that the concepts are incoherent, which is, for example, what Dennett argues about the concept of pain.<sup>61</sup> However, the fact that we use concepts in different ways in different contexts, and the fact that in ordinary language we sometimes say things about pain that are, strictly speaking, false, are not good arguments that these concepts do not refer at all. Concepts and their application might be problematic, which is the case for the concept ‘pain’ but also for the concept ‘knowledge’, but this does not mean that there are not such things as pain and knowledge.

There are two other main kinds of arguments against eliminativism.<sup>62</sup> The first kind of argument is that eliminativism is in some way self-refuting. The second kind of argument is that the eliminativist’s assessment of folk psychology is, in one way or other, mistaken. In the remainder of this section I will discuss both these kinds of arguments, starting with the first kind.

It has been argued by many and in many different ways that eliminativism is, in some sense, self-refuting.<sup>63</sup> To recall, the eliminativist does not only

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<sup>59</sup> Ramsey 2007.

<sup>60</sup> Churchland 1994: 43.

<sup>61</sup> Dennett 1978.

<sup>62</sup> Needless to say, there are many different kinds of arguments against eliminativism, but there are two kinds that are more common, important and powerful than others.

<sup>63</sup> For example by Baker 1987; Boghossian 1990; Boghossian 1991; Hannan 1994; Putnam, Churchland and Pylyshyn. I am here not discussing each version of the argument from self-refutation, since they tend to be quite similar. The aim of this section is not to give an

think that there is no (phenomenal) consciousness but also that there are no beliefs. Now, this creates a problem, since, as is often argued, in order for anyone (including the eliminativist) to make an assertion in ordinary language, this person has to believe that which is asserted. So if the eliminativist wants to assert that eliminativism is true, then the eliminativist is doing something that is contradictory to his own thesis: he has a belief. It is thus not the case that the proposition 'There are no beliefs' refutes the eliminativist's assertion directly, but the self-refutation lies in the (supposed) necessity for the eliminativist asserting his view to have the corresponding belief. In Hannan's words:

It is a consequence of EM [eliminativist materialism] that there are no propositional attitudes. But to accept EM, or to assert EM's truth, inescapably involves taking an attitude toward a proposition. Therefore, in the very act of endorsing or asserting EM, one proves that EM cannot be correct.<sup>64</sup>

Next to this pretty straightforward argument involving self-refutation, there is Baker's argument from self-refutation. In *Saving Belief*, Baker distinguishes three ways in which eliminativism can be said to be self-refuting. First, according to Baker, 'accepting a theory' and 'having good reason to accept a theory' are concepts that are part of folk psychology, which eliminativism wants to eliminate. This means that an eliminativist cannot coherently accept his own theory or claim (or think) that he, or anyone else, has good reason to accept his theory. Second, and this is the argument we have discussed above, the eliminativist cannot coherently assert eliminativism because any assertion involves a belief in some way (see above). Third, the eliminativist cannot coherently claim that eliminativism is true, since 'truth' and 'falsehood' are also concepts of folk psychology, which the eliminativist claims is mistaken and should be rejected.

Another argument for the thesis eliminativism is self-refuting, from Pylyshyn featured in Hannan (1994), draws on the idea that propositional attitudes are necessary to explain rational behavior. Since also eliminativists think that rational actions are the central data that need explanation, they are committed to their being propositional attitudes, which is exactly what they want to deny.<sup>65</sup>

Now, after considering these different arguments for the thesis that eliminativism is self-refuting, let's see what the eliminativist can say in his defense.

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exhaustive overview of arguments against eliminativism, but to give a sense of the general idea of them.

<sup>64</sup> Hannan 1994: 62.

<sup>65</sup> For a detailed account of this argument, see Hannan 1994: 66.



Basically, with respect to all these versions of the self-refutation argument, the eliminativist can claim that these arguments beg the question. I will first discuss this reply with respect to the first argument and Baker's versions of the argument. The eliminativism can claim that the arguments according to which the eliminativist needs to believe what he asserts just beg the question. After all, the eliminativist's claim is exactly that the common sense idea that beliefs play a role in assertions is false. That is: the idea that beliefs need to be involved in assertions is part of the folk psychology that the eliminativist rejects. As Ramsey writes:

According to eliminative materialism, all of the various capacities that we now explain by appealing to beliefs do not actually involve beliefs at all. So the eliminativist will hold that the self-refutation critics beg the question against eliminative materialism. To run this sort of objection, the critic endorses some principle about the necessity of beliefs which itself presupposes that eliminative materialism must be false.<sup>66</sup>

So, even though it might be argued that the eliminativist cannot assert eliminativism because that would involve beliefs which the eliminativist claims do not exist, the eliminativist can (should and will) simply deny that this folk psychological idea is accurate. Now, even though this is a good reply, it does not mean that, thereby, the eliminativist is out of shot. It might not be the case that eliminativism is self-refuting in this sense, but it is the case that the eliminativist needs to tell some story about how it is possible and likely for eliminativists to assert the truth of eliminativism. What is going on in such a situation if beliefs do not exist? What makes them assert this view and claim it is true? The eliminativist will have to present us with an account of these kinds of situations that sounds reasonable and could be accepted. Until that time, though, the burden of proof lies on the side of the eliminativist. After all, he cannot just get away with claiming that it is possible to assert (the truth of) a view without having beliefs, if he cannot explain just how this would work.

What about the argument from Pylyshyn? The eliminativist can take the same position here and argue that Pylyshyn's argument simply begs the question. The eliminativist will deny that propositional attitudes are necessary to explain rational behavior. It is, of course, another question how the eliminativist proffers to do this exactly and he will have to show and prove that this is in fact possible. We might again say that the burden of proof lies on the side of the eliminativist until he has shown just how he can explain rational behavior without appealing to propositional attitudes. Even though it is not

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<sup>66</sup> Ramsey 2007.

clear that eliminativism is self-refuting in the sense here specified, again, that does not mean he is out of trouble. There is still something in this argument to which an answer must be given.

The second kind of argument against eliminativism is that the eliminativist's assessment of folk psychology is, in one way or other, mistaken. Just as with the first argument against eliminativism, there are many different versions of this argument. Common to these arguments is that the eliminativist's assessment of folk psychology is mistaken; just how it is mistaken varies. In the following, I will look at three different variations of this argument.

One version of the argument is that folk psychology cannot conceivably prove false. For example, Fodor has argued for this in the following way:

Even if [commonsense psychology] were dispensable *in principle*, that would be no argument for dispensing with it. (...) What's relevant to whether commonsense psychology is worth defending is its dispensability *in fact*. And here the situation is absolutely clear. We have no idea of how to explain ourselves to ourselves except in a vocabulary which is saturated with belief/desire psychology. One is tempted to transcendental argument: What Kant said to Hume about physical objects holds, *mutatis mutandis*, for the propositional attitudes; we can't give them up *because we don't know how to*.<sup>67</sup>

Fodor thus thinks that, at least for now, it is inconceivable that folk psychology is false. This is one way to argue that the eliminativist's assessment of folk psychology is mistaken.

Another version of the argument is that the eliminativist wrongly holds that folk psychology fails to explain that which it is supposed to explain. According to eliminativism, folk psychological explanations are not any good and should be jettisoned, but what if these explanations actually are good and are a lot more successful than the eliminativist claims? Ramsey has explained this argument as follows:

Apart from the strong intuitive evidence that seems to reveal beliefs and desires, we also enjoy a great deal of success when we use common sense psychology to predict the actions of other people. Many have noted that this high degree of success provides us with something like an inference-to-the-best-explanation argument in favor of common sense psychology and against eliminativism. The best explanation for the success we enjoy in explaining and predicting human and animal behavior is that folk psychology is roughly true, and that there really are beliefs.<sup>68</sup>

This view is held by, among others, Kitcher (1984) and Fodor (1987).

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<sup>67</sup> Fodor 1987: 9–10.

<sup>68</sup> Ramsey 2007.

An argument in the proximity of this one is the argument that eliminativism relies on a certain prediction of the future of scientific psychology that does not have a secure basis. After all, folk psychology will need to be replaced by scientific psychology, if eliminativism is correct, but we don't even know yet whether that is going to develop, how it will develop, etc. Thus, eliminativism relies on something very futuristic and uncertain. Ramsey formulates this argument as follows:

Of course, some claim that these concerns are quite premature, given the promissory nature of eliminative materialism. After all, a pivotal component of the eliminativist perspective is the idea that the correct theory of the mind, once discovered by psychologists, will not reveal a system or structure that includes anything like common-sense mental states. Thus, for eliminative materialism to get off the ground, we need to assume that scientific psychology is going to turn out a certain way. But why suppose that before scientific psychology gets there? What is the point of drawing such a drastic conclusion about the nature of mentality, when a central premise needed for that conclusion is a long ways from being known?<sup>69</sup>

How can the eliminativist defend himself against these arguments? According to Ramsey, the eliminativist should recall developments in the philosophy of science, which have shown that a theory can seem successful when in fact it isn't. The fact that we think we couldn't do without folk psychology and the fact that folk psychology might seem successful, does not mean that it actually is successful:

A common eliminativist response to this argument is to re-emphasize a lesson from the philosophy of science; namely, that any theory —especially one that is as near and dear to us as folk psychology —can often appear successful even when it completely misrepresents reality. History demonstrates that we often discount anomalies, ignore failures as insignificant, and generally attribute more success to a popular theory than it deserves. Like the proponents of vitalism or phlogiston theory, we may be blind to the failings of folk psychology until an alternative account is in hand.<sup>70</sup>

Now, this is true, but if we bring Fodor's argument back in mind, this argument loses its force. Naturally, it *might* be the case that folk psychology is not any good, and it *might* be the case that the concepts of folk psychology will be overturned in the future, but these are speculations about what would be possible *in principle*, but not what is likely, or what actually is the case, *in*

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<sup>69</sup> Ibid.

<sup>70</sup> Ibid.

*fact*. I think that these arguments against eliminativism make a very important point to which the eliminativist does not have a good reply.

What should we conclude with respect to eliminativism? Is it a theory that we should accept and is this theory a reason to think that experiences and consciousness do not exist? Based on the arguments against eliminativism, we have to come to the conclusion that, in fact, eliminativism should be rejected. As we have just seen, there are many good arguments against eliminativism that seriously undermine the view, which is as such no longer tenable. Unfortunately, this last option open to the naturalist who wants to deny that there is such a thing as experience turns out not to be a good one. It seems, then, that we have to conclude that experience exists.

## 2.6 CONCLUSION

In the first section of this chapter, section 2.1, we considered what experiences actually are. We discussed the term 'experience', what kinds of experiences there are and in which ontological category experiences can be said to fall. Even though we did not decide upon this matter, this discussion did clarify the notion of experience so that we know what we are talking about when we ask whether there are such things.

As we have seen in this chapter, the apparent way out of the problem that the naturalist faces, to deny that there is such a thing as experience, is, in fact, not a way out. We started out by considering reasons against the existence of experience in section 2.2. We discussed 'the argument from awkwardness' and Byrne's argument against the existence of experience. Despite the fact that there are problems with these arguments, it did seem that if we could do without the notion of experience, we should.

However, even though there are good arguments to jettison the notion of experience, we found that there is an even better reason why we can't in fact do so. This reason is provided by Quine's criterion of ontological commitment which implies that anything that we quantify over exists. Using Van Inwagen's model, we concluded that this means that we have to say that experiences exist, since we and scientists with us quantify over experiences in our usage of the term in ordinary and scientific sentences which we genuinely endorse. We discussed this powerful argument for the existence of experience in section 2.3.

It turned out that the only escape from the Quinean argument would be to either eliminate or paraphrase away this kind of language. Since behaviorism and eliminativism can be seen as attempts exactly to this effect, we devoted

sections 2.4 and 2.5 to a discussion of these theories. However, we soon found that behaviorism and eliminativism face so many problems of their own that these theories are untenable. And it is not just other kinds of problems that surround them: their actual attempts at paraphrase and elimination are only very limitedly successful. This means that we are committed to the claim that experience exists. The subjectivity of experience is thus a genuine phenomenon.

## Metaphysical Naturalism

In order to be able to establish whether or not the subjectivity of experience is a problem for naturalism, the preliminary question of what naturalism is, needs answering. Contrary to what might be expected – given the fact that naturalism is the mainstream ontological position most analytic philosophers embrace these days – just what the thesis of naturalism exactly amounts to is far from clear. This is why this chapter and the next one are solely dedicated to shedding light on this issue.

I will not just be discussing naturalism here, but also materialism and physicalism. Since there is a lot of confusion about the terms ‘physicalism’, ‘materialism’, and ‘naturalism’ and the views these terms refer to, the first section of this chapter, 3.1, is solely dedicated to inventorying the definitions of these terms that can be found in the literature. In section 3.2, I will offer a way of organizing these definitions into two different versions of naturalism, which I will call ‘metaphysical naturalism’ on the one hand and ‘methodological naturalism’ on the other. There is a lot that needs to be said about this distinction and about these versions of naturalism. Here, I will also discuss if we also need to distinguish between ‘epistemological naturalism’ and ‘ontological naturalism’, and if so, how this distinction relates to the distinction between methodological and metaphysical naturalism. In section 3.3, I will then discuss if we need to distinguish a number of varieties of naturalism, namely reductive and non-reductive naturalism, weak and strong naturalism and soft and hard naturalism.

From here on this chapter will then be devoted to metaphysical naturalism, whereas Chapter 4 will concern itself with methodological naturalism. In section 3.4, I will discuss the question whether or not the terms ‘materialism’,

‘physicalism’ and ‘naturalism’ pick out different views within metaphysical naturalism or whether they are merely different names for the same view. The remainder of the chapter does not concern the different terms that are used to indicate metaphysical naturalism but the different views this term refers to. In section 3.5, I will discuss four groups that the definitions of metaphysical naturalism can be divided into. These groups correspond to four different kinds of metaphysical naturalism. The first sub-section, 3.5.1, is about the first kind of metaphysical naturalism that we can distinguish: ‘classical materialism’. Section 3.5.2 is about the second kind of metaphysical naturalism, a view that we have called ‘spatio-temporal materialism’. Section 3.5.3 concerns the third kind of metaphysical naturalism that we have found: ‘causal materialism’. Section 3.5.4 will be about the final kind of metaphysical naturalism, which is better called ‘anti-supernaturalism’.

In section 3.6 I will summarize the findings of this chapter and draw some conclusions.

### 3.1 DEFINITIONS OF MATERIALISM, PHYSICALISM AND NATURALISM

Since there is a lot of confusion about the terms ‘physicalism’, ‘materialism’ and ‘naturalism’, in this section I will present the results of inventorying the definitions of the terms ‘materialism’, ‘physicalism’ and ‘naturalism’ that can be found in the literature.<sup>1</sup> After listing them, I will proffer a way of organizing the definitions into two different groups, viz. metaphysical definitions and methodological definitions. Metaphysical definitions are definitions of metaphysical naturalism and methodological definitions are definitions of methodological naturalism. I will discuss these two categories of naturalism more in depth in the next section, section 3.2. Let’s start out with the definitions of materialism.

Materialism is:

- (M1) The view that token physicalism is true and that every event falls under the law of some science or other.<sup>2</sup>

<sup>1</sup> Some disclaimers regarding these definitions: (1) These definitions are not necessarily endorsed by the authors of the papers. (2) These definitions are put in chronological order, at least roughly, i.e. by year. (3) I do not claim that this list is exhaustive, although I do think it accurately represents the variety of views that can be found in the literature.

<sup>2</sup> Fodor 1974: 53.

- (M2) The view that the world contains nothing but the entities recognized by physics.<sup>3</sup>
- (M3) The view that everything is matter.<sup>4</sup>
- (M4) The view that everything that actually exists is material or physical.<sup>5</sup>
- (M5) The view that every thing and event in the universe is physical in every respect; that 'physical phenomenon' is coextensive with 'real phenomenon'.<sup>6</sup>
- (M6) The view that whenever we talk about an object, state of affairs or event in psychological terms, we can talk about the very same object, state of affairs or event in physical terms.<sup>7</sup>
- (M7) The view that all facts, in particular all mental facts, obtain in virtue of the spatiotemporal distribution, and properties, of matter.<sup>8</sup>
- (M8) The view that nothing exists except for space-time, material objects and events in space-time, and the properties exemplified by space-time and the objects and events therein.<sup>9</sup>
- (M9) The view that first, all reality is essentially a material reality and that therefore, second, no supernatural or immaterial reality can exist, and third, that all organic life arises from and returns to inorganic matter.<sup>10</sup>

There are many differences between these definitions of materialism. In the following discussion I will make several distinctions, starting with what I take to be the most important one. Ignoring smaller differences, the main

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<sup>3</sup> Armstrong 1980: 40. Armstrong follows J.J.C. Smart in this definition.

<sup>4</sup> Crane & Mellor 1990: 65.

<sup>5</sup> Moser & Trout (eds.) 1995: 1.

<sup>6</sup> Strawson 1999: 504.

<sup>7</sup> Rosenthal 2000: 3.

<sup>8</sup> Loewer 2001: 37.

<sup>9</sup> Rea 2002: 8.

<sup>10</sup> Vitzthum.



distinction that should be made is between metaphysical definitions on the one hand and methodological definitions on the other hand.

The first category of definitions that we can distinguish is the category of 'methodological definitions'. These definitions specify that materialism is a view that provides a certain methodology for deciding which (kinds of) things exist. That is: the view does not specify directly which kinds of things exist but does so indirectly only by specifying which method we should use to determine which (kinds of) things exist. This method is science. I take it as a sufficient condition for a view to be called a 'methodological view' if its definition makes reference to the term 'science' or related terms such as 'the scientific method' or particular sciences such as 'physics'. 'Method' should here thus be interpreted in a wide sense.

The methodological definitions that we have encountered present materialism as the view that physics tells us what there is (M<sub>2</sub>), or that for entities to exist, they have to fall under the laws of 'some science' (M<sub>1</sub>). In these cases 'physics' and 'some science' are used as methods to determine which things exist. Needless to say, there are vast differences between definitions (M<sub>1</sub>) and (M<sub>2</sub>). For now, I want to merely point out that they share the methodological characterization of materialism as the view according to which science – somehow – tells us what (kinds of) things exists.

The second category of definitions that we can distinguish is that of 'metaphysical definitions', that is: definitions of (a) metaphysical view(s). I take a metaphysical view to be a view about which (kinds of) things exist without a reference to science, the scientific method, or particular sciences. Definitions that fall into this group claim that materialism is a view about which (kinds of) things exist, without using the term 'science' and related terms. The categories 'metaphysical materialism' and 'methodological materialism' are thus mutually exclusive.

The definitions of metaphysical materialism express the idea that the only things that exist or that are 'real' are things made out of 'matter', or 'physical things'. The definitions that fall into the group of metaphysical definitions are: (M<sub>3</sub>), (M<sub>4</sub>), (M<sub>5</sub>), (M<sub>6</sub>), (M<sub>7</sub>), (M<sub>8</sub>) and (M<sub>9</sub>). Of these, (M<sub>7</sub>) and (M<sub>8</sub>) are the only definitions in which the term 'space-time' occurs, which gives us some clue as to how one might understand what it means for something to be material or physical (according to these definitions). This is of course a crucial issue for metaphysical definitions and will be further discussed in section 3.5.

The distinction between metaphysical and methodological materialism is the main distinction between these definitions. However, there is another distinction that functions within this first distinction that is important to

discuss, namely the secondary distinction between epistemological definitions on the one hand and ontological definitions on the other. Both metaphysical and methodological materialism can be expressed in two different ways: in an epistemological way and in an ontological way. Or in other words, the definitions of both metaphysical and methodological materialism can be further divided into two groups: epistemological definitions and ontological definitions. What is the difference between epistemological and ontological definitions? For lack of a better term, 'epistemological' definitions are definitions formulated in terms of truth(s), facts, statements and so on, whereas 'ontological' definitions are phrased in terms of existence and similar terms. So, according to methodological-epistemological definitions, science tells us what is true, whereas according to metaphysical-ontological definitions, science tells us what exists. Similarly, an example of a metaphysical-epistemological definition is: 'All facts are physical facts'; whereas an example of a metaphysical-ontological definition is: 'Everything that exists is in space'.

To make the distinction between epistemological and ontological definitions more clear, I will show how the methodological and metaphysical definitions of materialism can be divided up into these two categories. There are only two methodological definitions, i.e. definitions that make reference to science, among the definitions of materialism: (M1) and (M2). Both these definitions are ontological: they specify which kinds of entities (M2) or events (M1) exist. By far most definitions of materialism are metaphysical, which means they do not contain a reference to science. Of these metaphysical definitions only one is metaphysical-epistemological: (M6). Definition (M6) is put in terms of 'terms', which makes it epistemological.<sup>11</sup>

Two general things should be noted with respect to the distinction between epistemological and ontological definitions. First, the distinction between epistemological and ontological naturalism does not occur at the same level as the distinction between metaphysical and methodological naturalism but cuts across this more basic, primary distinction. Second, it should be clear that the epistemological definitions entail their ontological counterparts. Or in other words: if one of the epistemological formulations of materialism is true, then it follows that its ontological counterpart is true as well. However, the reverse does not hold. That is, if an ontological version of materialism is true, it does not necessarily follow that its epistemological counterpart is true.

Next, I would like to turn to definitions of 'physicalism' that can be found in the literature.

<sup>11</sup> One might think it should be called a 'semantic' definition. More about this in section 3.2.

Physicalism is:

- (P1) The view that every meaningful sentence, whether true or false, could be translated into physical language.<sup>12</sup>
- (P2) The view that a person, with all his psychological attributes, is nothing over and above his body, with all its physical attributes.<sup>13</sup>
- (P3) The view that all that exists in space-time is physical.<sup>14</sup>
- (P4) The view that everything is physical. All entities, properties, relations, and facts are those which are studied by physics or other physical sciences.<sup>15</sup>
- (P5) The view that the empirical world contains just what a true complete physics would say it contains.<sup>16</sup>
- (P6) The view that the only individual things that exist are physical things.<sup>17</sup>
- (P7) The view that would be true IFF every world that is a minimal physical duplicate of the actual world is a duplicate simpliciter.<sup>18</sup>
- (P8) The view that all factual knowledge can be formulated as a statement about physical objects and activities.<sup>19</sup>
- (P9) The view that everything that interacts causally with the physical world is physical.<sup>20</sup>

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<sup>12</sup> Definition from Neurath & Carnap (1932/1934) in Gillett 2001: 251.

<sup>13</sup> Nagel 1965: 96.

<sup>14</sup> Kim 1989: 134.

<sup>15</sup> Crane & Mellor 1990: 65.

<sup>16</sup> Ibid.

<sup>17</sup> Van Inwagen 1993: 151. Van Inwagen also describes a weaker form of physicalism: the thesis that human persons are physical things.

<sup>18</sup> Definition from Jackson (1998) in Loewer 2001: 39.

<sup>19</sup> Zachar.

<sup>20</sup> Papineau 2001: 11.

(P10) The view that all facts obtain in virtue of the distribution of the fundamental entities and properties – whatever they turn out to be – of completed fundamental physics.<sup>21</sup>

(P11) The view that all God had to do to create our world was to create its physical facts and laws; the rest followed from these.<sup>22</sup>

Just as is the case with the definitions of materialism, the definitions of physicalism fall into two different categories. In fact, we can distinguish the same categories in the definitions of physicalism as we distinguished within the definitions of materialism.

First, there is the category of definitions that characterize physicalism as a metaphysical view. These definitions say that physicalism is the view that only ‘material’ or ‘physical’ things exist. As I mentioned before, we need to know what these terms mean exactly for these metaphysical definitions to be meaningful. The definitions of physicalism that fall into the group of metaphysical definitions are: (P1), (P2), (P3), (P6), (P7) (P8), (P9) and (P11). Although (P2) is about persons, it’s still a definition of physicalism in terms of which things exist (namely, on this view, there are no psychological attributes which aren’t reducible to physical attributes).

Second, we can distinguish a category of definitions of physicalism that are methodological. These definitions characterize physicalism as the view that specifies science as the method for determining which things exist. Science can be regarded as a ‘method’ here, since these definitions do not tell us directly which things exist, but they introduce a method according to which we can determine which (kinds of) things exist. This is the case for the following definitions: (P4), (P5) and (P10).

Also, in the definitions of physicalism, we can distinguish between epistemological and ontological definitions. Let’s look at the metaphysical definitions first and see which ones are epistemological and which ones are ontological. Of the metaphysical definitions, epistemological definitions are: (P1), (P8) and (P11). These definitions do not refer to science, which makes them metaphysical, and they are formulated in terms of ‘factual knowledge’ (P8), ‘facts and laws’ (P11) and ‘sentences and language’ (P1).<sup>23</sup> Metaphysical-ontological definitions are: (P2), (P3), (P6), (P7) and (P9). These definitions

<sup>21</sup> Loewer 2001: 37.

<sup>22</sup> Ibid.: 39.

<sup>23</sup> Of (P1) it might again be thought that ‘semantic’ is a better way to describe this definition, which I will discuss in section 3.2.

do not make reference to science, which makes them metaphysical definitions, and they are formulated in terms of 'existence' (P<sub>2</sub>, P<sub>3</sub>, P<sub>6</sub>), 'causal interaction' (P<sub>9</sub>) and 'worlds' (P<sub>7</sub>).

Of the methodological definitions, epistemological definitions include: possibly (P<sub>4</sub>) and (P<sub>5</sub>). Both of these are unclear cases. (P<sub>4</sub>) is epistemological *and* ontological since the definition speaks of 'entities, properties, relations and facts' and (P<sub>5</sub>) speaks of 'what the world contains' which could be interpreted both in an epistemological and an ontological way. Of the methodological definitions, there are no ontological definitions.

Finally, let's turn to the definitions of naturalism.

Naturalism is:

- (N<sub>1</sub>) The recognition of the impressive implications of the physical and the biological sciences.<sup>24</sup>
- (N<sub>2</sub>) The view that the world is a single system of things or events every one of which is bound to every other in a network of relations and laws, and (...) outside this 'natural order' there is nothing.<sup>25</sup>
- (N<sub>3</sub>) The view that science is the measure of all things, of what is that it is and of what is not that it is not.<sup>26</sup>
- (N<sub>4</sub>) The view that whatever exists or happens is *natural* in the sense of being susceptible to explanation through methods which, although paradigmatically exemplified in the natural sciences, are continuous from domain to domain of objects and events.<sup>27</sup>
- (N<sub>5</sub>) The view that philosophy is not an a priori propaedeutic or groundwork for science, but is continuous with science.<sup>28</sup>
- (N<sub>6</sub>) The view that reality consists of nothing but an all-embracing spatio-temporal system.<sup>29</sup>

<sup>24</sup> Definition of Sellars (1922) in Brandl 2007: 249.

<sup>25</sup> Stace 1949: 22.

<sup>26</sup> Sellars 1963: 173.

<sup>27</sup> Danto 1967: 448.

<sup>28</sup> Definition from Quine (1975) in Hacker 2007: 144.

<sup>29</sup> Armstrong 1980: 35.

- (N7) The view that it is within science itself, and not in some prior philosophy, that reality is to be identified and described.<sup>30</sup>
- (N8) The view that imposes a constraint on what there can be, stipulating that there are no nonnatural or unnatural, praeternatural or supernatural entities. (...) Nature comprises those entities and constructs made of those entities that the ideal physics, realistically interpreted, posits.<sup>31</sup>
- (N9) The view that the world contains nothing supernatural.<sup>32</sup>
- (N10) The view that attempts to construct intelligible explanatory theories and to move toward eventual integration with the core natural sciences.<sup>33</sup>
- (N11) The view that philosophy is continuous with the natural sciences.<sup>34</sup>
- (N12) The view that only natural objects are real, where natural is understood as to refer to whatever is recognized by science.<sup>35</sup>
- (N13) The view that there is only one way of knowing: the empirical way that is the basis of science (whatever that way may be).<sup>36</sup>
- (N14) The view that everything that exists is part of nature, or part of the natural order.<sup>37</sup>
- (N15) The view that reality is exhausted by nature, containing nothing 'supernatural', and that the scientific method should be used to investigate all areas of reality, including the 'human spirit'.<sup>38</sup>

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<sup>30</sup> Quine 1981: 66.

<sup>31</sup> Pettit 1992: 245, 247.

<sup>32</sup> Tye 1994: 129.

<sup>33</sup> Chomsky 1994: 153.

<sup>34</sup> Moser & Trout (eds.) 1995: 9.

<sup>35</sup> Schmitt 1995: 343.

<sup>36</sup> Devitt 1998: 45.

<sup>37</sup> Keil 2000: 146.

<sup>38</sup> Papineau 2007.

- (N16) The view that can be characterized briefly by the thesis: everywhere in the world everything can be explained rationally (überall in der Welt geht es mit rechten Dingen zu).<sup>39</sup>
- (N17) The view that the sciences determine their own path without being constrained by a priori philosophical reasoning.<sup>40</sup>
- (N18) The view that takes as its starting point the assertion that only certain (naturalist) metaphysical claims are acceptable and that other (supernatural) claims are to be rejected. Most often the underlying metaphysical distinction is made on the basis of the ontology used by science by claiming that only entities recognized by science should be called upon by naturalist philosophy.<sup>41</sup>
- (N19) The view that has as its starting point the assertion that only certain kinds of epistemic methods can be rational. (...) It is typically – though not necessarily – science that provides the measure for what methods are acceptable.<sup>42</sup>
- (N20) A shared research program – a subset of a maximal set of methodological dispositions – that treats the methods of science and those methods alone as basic sources of evidence.<sup>43</sup>
- (N21) A more ambitious definition qualifies naturalism in ontological respects as materialistic; in methodological respects as making the heaviest possible use of natural sciences and in epistemological respects as proposing a hypothetical realism.<sup>44</sup>

From this list it is clear that the definitions of naturalism are even more diverse than the definitions of materialism and physicalism. However, as might be expected, we can distinguish the same categories of definitions here as we have distinguished within the definitions of materialism and physicalism.

First, there is the category of metaphysical definitions of naturalism that

<sup>39</sup> Gasser 2007: 27. Translation Gasser's.

<sup>40</sup> Brandl 2007: 244.

<sup>41</sup> Ibid.: 188.

<sup>42</sup> Ibid.

<sup>43</sup> Rea 2007: 107.

<sup>44</sup> Frey 2007: 120.

tell us that all that exists is material, physical, and/or spatio-temporal and that there does not exist anything that is supernatural in any way. The definitions of naturalism that fall into this group of metaphysical definitions are: (N<sub>2</sub>), (N<sub>6</sub>), (N<sub>9</sub>), (N<sub>14</sub>) and (N<sub>21</sub>).

Second, there is the category of methodological definitions of naturalism in which science is singled out as – somehow – providing us with the method for discerning which (kinds of) things exist. By far the most definitions of naturalism that we have seen fall into this group of methodological definitions, namely: (N<sub>1</sub>), (N<sub>3</sub>), (N<sub>4</sub>), (N<sub>8</sub>), (N<sub>10</sub>), (N<sub>12</sub>), (N<sub>13</sub>), (N<sub>15</sub>), (N<sub>16</sub>), (N<sub>18</sub>), (N<sub>19</sub>), (even though this last definition of naturalism strikes me as a rather odd definition), and (N<sub>20</sub>).

There are some definitions, according to which, naturalism is not either just a metaphysical view or just a methodological view, but according to which it is a combination of these. Definition (N<sub>21</sub>) is a good example, which is why I have mentioned (N<sub>21</sub>) in both lists. The position that naturalism is in some way a combination of certain metaphysical claims and a certain methodological (or epistemological) program has been expressed more often. For example, Vollmer thinks that naturalism is a certain program, but that within this program there are certain theses that naturalism affirms, not just of methodology but also of content.<sup>45</sup> Sukkop holds a similar position. He writes: 'Naturalism is not only, but also, a research program and can be identified by various theses.'<sup>46</sup> I will not discuss these definitions separately, but I will trust that these will be discussed by addressing both the metaphysical and the methodological definitions of naturalism. I am not of the opinion that the idea that naturalism is a combination of these kinds of views does any good for them, or somehow makes them invulnerable to problems that rise for either metaphysical or methodological definitions. In my mind, 'combination naturalism' (like N<sub>21</sub>) is, on the contrary, twice as vulnerable, namely to problems that rise for both of these kinds of views. Moreover, there is a certain tension between metaphysical naturalism and methodological naturalism, which is problematic for anyone trying to defend a combination view. I will discuss this tension further in Chapter 4, section 4.5.

Within definitions of naturalism we can distinguish a third category of definitions, at the same level as the categories metaphysical and methodological, which we did not encounter for the definitions of materialism and physicalism. This third category of definitions can be called 'philosophical naturalism'. Definitions that fall into this category are definitions that make

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<sup>45</sup> Cf. Vollmer 2007.

<sup>46</sup> Sukkop 2007: 78.



a claim about philosophy – more specifically, they all make claims about philosophy's position with respect to the sciences. Definitions that fall into this category are: (N<sub>5</sub>), (N<sub>11</sub>) and (N<sub>17</sub>). Despite the fact that these definitions are interesting in their own right, for this project I am not interested in philosophical naturalism.

Of the methodological definitions of naturalism, which ones are epistemological? Methodological-epistemological definitions include: (N<sub>1</sub>), (N<sub>4</sub>), (N<sub>7</sub>), (N<sub>10</sub>), (N<sub>13</sub>), (N<sub>16</sub>), (N<sub>18</sub>), (N<sub>19</sub>) and (N<sub>20</sub>). Methodological-ontological definitions are: (N<sub>3</sub>), (N<sub>7</sub>), (N<sub>8</sub>), (N<sub>12</sub>), (N<sub>15</sub>) and (N<sub>21</sub>). The classification of some of these definitions is controversial and (N<sub>7</sub>) is placed on both the epistemological as the ontological list because it speaks of 'reality', which could equally well be interpreted in an ontological as in an epistemological way, in terms of, respectively, entities and states of affairs or facts.

Of the metaphysical definitions of naturalism, which ones are epistemological? None of the definitions are metaphysical-epistemological, which means that they are all metaphysical-ontological definitions.

### 3.2 MAPPING ONTO THE LITERATURE

Our main finding in the previous section was that we can divide all of the definitions of materialism, physicalism and naturalism into two main categories: metaphysical definitions on the one hand and methodological definitions on the other hand. What is interesting is that it seems to be the case that the metaphysical definitions of materialism, as well as of physicalism, as well as of naturalism, are actually very similar. Also, the methodological definitions of materialism, physicalism, and naturalism are very similar. The metaphysical definitions all specify which things, or which kinds of things, exist: e.g. physical things, matter, anything in space-time, etc. These definitions are intensional definitions: they tell us which kinds of things exist. Methodological definitions, on the other hand, are extensional: these definitions do not tell us which things or which kinds of things exist, but they specify a method or a criterion that will enable us to find out which (kinds of) things exist. This method is science or the scientific method (or a particular science, such as physics). I have assumed that a reference to the scientific method, or 'science', is a necessary and sufficient condition for a definition to count as a methodological definition. From here on I will call the main distinction that we introduced in the previous section the distinction between 'metaphysical naturalism' (in the literature also sometimes called 'ontological naturalism', 'materialism' or

‘physicalism’) and ‘methodological naturalism’ (in the literature sometimes just called ‘naturalism’).

Although metaphysical naturalism and methodological naturalism are the two main versions of naturalism that are often distinguished, in the previous section we drew another important distinction, viz. the distinction between epistemological and ontological definitions. We have seen that the metaphysical as well as the methodological definitions of materialism can be further divided into these two groups. ‘Epistemological’ definitions, for lack of a better term, are phrased in terms of ‘facts’, ‘states of affairs’, ‘truth’, ‘language’ and so on, whereas ‘ontological’ definitions are formulated in terms of ‘existence’, ‘entities’, ‘events’, etc. We have seen that the distinction between epistemological and ontological distinctions is a secondary distinction that functions within the earlier, primary, distinction between metaphysical and methodological naturalism.

In the literature, similar attempts have been made to categorize and organize the different definitions of materialism, physicalism and naturalism. Some are similar to the distinctions that I have drawn, others are different. In this section, I will discuss some of the distinctions that have been made in the literature and I will show how my distinctions map onto these. In the literature the terms ‘metaphysical’ and ‘methodological’ naturalism are often used to distinguish different kinds of naturalism, but my distinction in those terms does not necessarily map onto the distinctions found in the literature. Since this can cause confusion, I will discuss a few distinctions between ‘metaphysical’ naturalism and ‘methodological’ naturalism that can be found in the literature and their respective meanings.

Papineau has formulated a similar distinction between metaphysical (in his terms: ‘ontological’) and methodological naturalism, which is not identical to mine, but also not far removed from it. Papineau describes these not as different versions of naturalism, but as different components of a general naturalism. Here is what he writes:

Naturalism can intuitively be separated into an ontological and a methodological component. The ontological component is concerned with the contents of reality, asserting that reality has no place for ‘supernatural’ or other ‘spooky’ kinds of entity. By contrast, the methodological component is concerned with the ways of investigating reality, and claims some kind of general authority for the scientific method.<sup>47</sup>

It is clear from this passage that the distinction that Papineau draws between methodological and ontological naturalism is very similar to the distinction

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<sup>47</sup> Papineau 2007.

that we have drawn between methodological and metaphysical naturalism. The ontological component that he describes is a version of metaphysical naturalism that we will come to discuss later on in this chapter (i.e. anti-supernaturalism) and of which we have encountered a number of definitions in the first section. We have called this ‘metaphysical’ naturalism and have reserved the term ‘ontological’ to indicate something else. According to Papineau, the methodological component claims that the scientific method is the right method for investigating reality, which is exactly how we have described methodological naturalism. Papineau thinks that naturalism is a combination of methodological and, in our terms, metaphysical naturalism. Papineau’s distinction is thus the same, although the terms he uses are different.

In the introduction to *Naturalism in Question*, a distinction is also made between ontological and methodological naturalism. Whereas Papineau calls them ‘components’, De Caro and MacArthur first distinguish two ‘themes’ of naturalism:

An Ontological Theme: a commitment to an exclusively scientific conception of nature;

A Methodological Theme: a reconception of the traditional relation between philosophy and science according to which philosophical inquiry is conceived as continuous with science.<sup>48</sup>

The interesting thing is that these descriptions would be very differently categorized according to the categorization we introduced in the previous section. De Caro and MacArthur’s ‘ontological theme’ refers to science and speaks of a ‘conception’ of nature, which would make it a description of methodological-epistemological naturalism according to our categorization. Their ‘methodological theme’ would be called ‘philosophical naturalism’ on our account, since it makes a claim about the position of philosophy with respect to science.

De Caro and MacArthur then go on to distinguish between the ‘ontological scientific naturalist’ and the ‘methodological scientific naturalist’ based on the two themes they distinguished earlier. They do so as follows:

- i) The *ontological scientific naturalist* holds that the entities posited by acceptable scientific explanations are the *only* genuine entities that there are. A weaker version holds that scientific posits are the only unproblematic (or nonqueer) entities that there are.
- ii) The *methodological (or epistemological) scientific naturalist* holds that it is *only* by following the methods of the natural sciences – or, at a minimum, the empirical methods of a posteriori inquiry – that one arrives at genuine knowledge. A weaker

<sup>48</sup> De Caro and MacArthur 2004: 3.

version holds that the methods of the natural sciences are the only unproblematic (or unmysterious) kind of knowledge that there is, thus provisionally allowing for nonscientific knowledge in some loose or practical senses.

This is where it gets even more interesting. When the ‘ontological theme’ is spelled out, it changes: the first passage was a methodological-epistemological description; the second passage is a methodological-ontological description. After all, there is a reference to science, making the description methodological, and the description is formulated in terms of ‘entities’, making it an ontological description. The ‘methodological theme’ also changes when it is spelled out. The first description is one of philosophical naturalism, but, in this second passage, the description of naturalism is a methodological-epistemological one: there is a reference to science and it is phrased in terms of ‘methods’ and ‘knowledge’. In the second set of passages, the distinction made is the one between methodological-epistemological naturalism on the one hand and methodological-ontological naturalism on the other hand.

As should be clear from these passages, the categories into which different forms of naturalism are divided bear different names, but the same kinds of naturalism are distinguished, i.e. the differences in content of the different definitions (or descriptions) of naturalism are pointed out; they are just called by a different name. One of the main differences between my distinction and De Caro and MacArthur’s is that there is a reference to science in their description of ontological naturalism, which is not the case in either Papineau’s or my description of ontological (i.e. metaphysical, in our terms) naturalism. However, the description of methodological naturalism is very similar to Papineau’s and to mine.

The third and final distinction between ontological and methodological naturalism that I want to discuss is due to Moser & Yandell. Here is the distinction they make:

Core ontological naturalism: every real entity either consists of or is somehow ontologically grounded in the objects countenanced by the hypothetically completed empirical sciences (that is, in the objects of a natural ontology).

Core Methodological Naturalism: every legitimate method of acquiring knowledge consists of or is grounded in the hypothetically completed methods of the empirical sciences (that is natural methods).<sup>49</sup>

Now, Moser and Yandell’s distinction is pretty much identical to the, second, distinction that De Caro and MacArthur draw: it’s a distinction between

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<sup>49</sup> Moser & Yandell 2000: 10.

methodological-ontological naturalism on the one hand and methodological-epistemological naturalism on the other hand.

These distinctions made in the literature are all slightly different from one another and from the distinction that I have drawn. However, the differences are not too big to overcome and there is some degree of arbitrariness in any kind of distinction like this. As long as we employ the distinction consistently, there should not be much of a problem. However, not everyone shares this opinion. For example, Rea thinks differently and maintains that these alleged versions of naturalism are nonexistent. He thinks that there must be something these versions of naturalism have in common, since they are all called 'versions of naturalism', but, if this is the case, then that which the versions have in common should be called 'naturalism'. In Rea's own words:

There must be some reason why the relevant doctrines are rightly identified as versions of naturalism rather than as disparate theses that bear no substantive relation to one another. Perhaps they presuppose a common view about nature, or a common view about how philosophical inquiry should be conducted. But if so, then it seems that naturalism itself ought to be characterized as whatever it is that the different 'versions' of naturalism have in common. As it is, however, we are often left largely in the dark as to what the connection between the various putative versions of naturalism is supposed to be.<sup>50</sup>

It should be noted that this is not the only reason for Rea to think that there are no different versions of naturalism. As a matter of fact, Rea thinks that neither naturalism in general nor any version of naturalism (such as metaphysical, methodological, etc.) can express a coherent and substantive philosophical thesis. I will discuss this further in Chapter 4, section 4.2.

Before we can look at the various definitions of metaphysical and methodological naturalism more in depth, we first need to consider how our distinctions map onto other general distinctions made in the literature: I am thinking of 'epistemological' naturalism and 'semantic' naturalism.

According to some, there is not just metaphysical naturalism and methodological naturalism, but there is also an epistemological version of naturalism. Now, this is not the epistemological version of either metaphysical or methodological naturalism that I have introduced and we have discussed. This kind of epistemological naturalism is distinguished at the same level as methodological and metaphysical naturalism. What, if anything, would this 'epistemological' naturalism be? Just as we saw for the cases of ontological naturalism and methodological naturalism, there is no consensus on

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<sup>50</sup> Rea 2002: 53.

what epistemological naturalism would be. In what follows, I will contrast the epistemological versions of naturalism that I have distinguished from the epistemological naturalism in the literature.

According to my interpretation of the term, definitions of metaphysical and methodological naturalism can be classified as 'epistemological' iff some of the terms that are used are 'epistemological' terms in a very broad sense. That is to say, definitions are epistemological if some of the terms used in it are either related to the terms that occur in the classical analysis of knowledge as 'justified true belief' or are any of the following: 'facts', 'explanation', 'states of affairs'. Of the definitions of naturalism, we have seen that the following definitions can be called 'epistemological definitions': (N13), (N4), (N10), (N16), (N7), (N18), (N19), (N1), (N20). For example, definition (N13) is put in terms of knowledge: 'there is only one way of knowing'. In (N10) the terms 'intelligible explanatory theories' occur and in (N16) the terms 'explained rationally' occur. Definition (N19) explicitly speaks of 'certain kinds of epistemic methods'. Certain definitions of methodological naturalism thus contain essentially epistemological terms, which can be taken as a sufficient condition for these definitions to be definitions of 'epistemological naturalism'.

But should we in fact take the usage of classical epistemological terms as sufficient for making these definitions epistemological definitions? And are the definitions of naturalism that are 'epistemological' in this way thereby not methodological definitions? I think what we should say here is the following. First of all, the usage of epistemological terms can be taken as sufficient for the definitions in which those terms occur to be called 'epistemological', thereby making the view they refer to an 'epistemological naturalism'. Second, even though we can label a certain group of definitions as 'epistemological' based on the occurrence of epistemological terms in these definitions, this does not mean that these definitions are therefore not methodological definitions (any more). After all, we posited that a central reference to the scientific method is sufficient for a definition to be classified as a methodological definition. Even though we could distinguish a group of epistemological definitions, these – assuming they contain a reference to science or the scientific method – are still a sub-group of methodological definitions. Even though epistemological terms are used, the main thrust of these definitions is that science or the scientific method is the central criterion for us in investigating reality and discovering which kinds of things really exist.

As I mentioned before, epistemological naturalism is not always distinguished in the literature, and, if it is, it is not always described in the same way as I do here. Rea, who thinks that these versions of naturalism actually

do not exist, has nevertheless also talked about epistemological naturalism. As we know, he concludes that this is not a version of naturalism, since there are no versions of naturalism at all, according to Rea. However, he does have an additional reason not to distinguish an epistemological version of naturalism. His reason is that this epistemological version of naturalism can hardly be construed as a version of naturalism at all. This is true for the definitions that he discusses because he understands epistemological naturalism very differently than we have done. Whereas we interpreted definitions of naturalism as epistemological iff they contained epistemological terms, Rea understands epistemological naturalism as follows:

There are two sorts of theses that can be and often are referred to by the label ‘epistemological naturalism’: theses about the discipline of epistemology, and theses about knowledge or justified belief.<sup>51</sup>

Rea goes on to mention a number of examples of such theses, of which I will just quote one:

Epistemology is a branch of science. The statements of epistemology are a subset of the statements of science, and the proper method of doing epistemology is the empirical method of science.<sup>52</sup>

It is obvious now that Rea thinks definitions of ‘epistemological naturalism’ such as the one above, which is numbered by him as (3.9), can hardly be construed as versions of naturalism. This is a thesis about epistemology and it might be a naturalistic form of epistemology, but it is thereby not an epistemological version of naturalism. As Rea puts it:

Theses like 3.9 about the discipline of epistemology are not at all plausibly construed as versions of naturalism. Certainly they might be endorsed by naturalists, they might be among the consequences of naturalism, and they might serve well as statements of what is involved in taking a naturalistic approach to epistemology. But I see no reason to think that one could count as a naturalist simply by endorsing some such thesis.<sup>53</sup>

It thus depends on one’s interpretation of ‘epistemological naturalism’ whether such a version of naturalism should be distinguished. Even if it can be distinguished, as it can be according to the interpretation we proffered,

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<sup>51</sup> Rea 2002: 59.

<sup>52</sup> Goldman 1999: 2.

<sup>53</sup> Rea 2002: 59–60.

it does not mean that it should be or that it cannot be subsumed under a methodological version of naturalism.

Not only 'epistemological naturalism' is sometimes distinguished, but sometimes also 'semantic naturalism' is distinguished from metaphysical and methodological naturalism. For example, De Caro and McArthur distinguish semantic naturalism from both metaphysical and methodological naturalism. What is 'semantic naturalism'? Here is how De Caro and McArthur describe semantic naturalism:

The semantic scientific naturalist holds that the concepts employed by the natural sciences are the only genuine concepts we have and that other concepts can only be retained if we can find an interpretation of them in terms of scientifically respectable concepts. A weaker version holds that such concepts are the only unproblematic concepts we have.<sup>54</sup>

According to this description, one would expect semantic definitions of naturalism to contain a reference to 'concepts' or 'language' or a similar term. Are there any such definitions in our list? There are three of them:

- (M6) The view that whenever we talk about an object, state of affairs or event in psychological terms, we can talk about the very same object, state of affairs or event in physical terms.<sup>55</sup>
  
- (P1) The view that every meaningful sentence, whether true or false, could be translated into physical language.<sup>56</sup>
  
- (N18) The view that takes as its starting point the assertion that only certain (naturalist) metaphysical claims are acceptable and that other (supernatural) claims are to be rejected. Most often the underlying metaphysical distinction is made on the basis of the ontology used by science by claiming that only entities recognized by science should be called upon by naturalist philosophy.<sup>57</sup>

Now, should we distinguish a form of semantic naturalism? We can answer this question along similar lines as we answered the question whether or not

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<sup>54</sup> De Caro and MacArthur 2004: 7.

<sup>55</sup> Rosenthal 2000: 3.

<sup>56</sup> Definition from Neurath & Carnap in Gillett 2001: 251.

<sup>57</sup> *Ibid.*: 188.



epistemological naturalism should be distinguished. That is, we can distinguish ‘semantic naturalism’ and definitions that refer to this view by positing that a sufficient condition for a definition to be a semantic definition is that in the definition semantic terms (such as ‘concepts’, ‘language’, ‘talk’, ‘claims’) are used. However, I think that semantic naturalism will still be a sub-group of (our version of) epistemological naturalism. After all, epistemological definitions are definitions that are phrased in terms of ‘facts’, ‘truth’, ‘states of affairs’, but also ‘language’, ‘terms’, ‘concepts’. Some (but presumably not all) of these definitions could also be called ‘semantic’ distinctions. If this is the case, then why don’t I use the term ‘semantic naturalism’? I don’t use this term because I think that we have distinguished plenty of versions of naturalism and I don’t see a reason to introduce a distinction between epistemological and semantic naturalism. That being said, it is fine with me if one wants to call some of the epistemological definitions semantic definitions instead.

The main part of this chapter, starting with section 3.4, will be devoted to metaphysical naturalism and in the next chapter I will discuss methodological naturalism.

### 3.3 VARIETIES OF NATURALISM

In the first section of this chapter we have seen a long list of definitions of materialism, physicalism and naturalism and in the second section we have divided these into two versions of naturalism with the names: ‘metaphysical naturalism’ and ‘methodological naturalism’. As the vast number and diversity of the definitions of naturalism show, it is very unclear what naturalism exactly is. One only needs to open any book on naturalism to find this claim made explicit. Let’s look at some passages that describe the confusion and ambiguities concerning the term ‘naturalism’:

For better or worse, “naturalism” is widely viewed as a positive term in philosophical circles—few active philosophers nowadays are happy to announce themselves as “non-naturalists”. This inevitably leads to a divergence in understanding the requirements of “naturalism”.<sup>58</sup>

Naturalism is identified sometimes with materialism, sometimes with empiricism, and sometimes with scienticism; but all of these positions are equally difficult to characterize and, in any case, the identifications are controversial.<sup>59</sup>

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<sup>58</sup> Papineau 2007.

<sup>59</sup> Rea 2002: 21.

Although there is no familiar definition of naturalism at hand, the commitment to an explanatory closure of the spatio-temporal world can be taken plausibly as a defining feature of naturalism.<sup>60</sup>

The appearance of a pro-naturalistic consensus in contemporary analytic philosophy is quite misleading.<sup>61</sup>

Since Dewey's espousal of naturalism, a richly branching family of various positions that go by that name has evolved. Indeed, when one considers all these positions it is hard to identify anything that they have in common beyond a generally favourable attitude to science.<sup>62</sup>

The closest thing to a common core of meaning [of naturalism] is probably the view that the methods of natural science provide the only avenue to truth.<sup>63</sup>

A term is only as useful as the class of things it identifies and, in the case of 'naturalism', the breadth of the common meaning is such as to have made it difficult to have a focused discussion as anything like a core of the position has been obscured by vagueness.<sup>64</sup>

'Naturalism' seems to me in this and other respects rather like 'World Peace'. Almost everyone swears allegiance to it, and is willing to march under its banner. But disputes still break out about what it is appropriate or acceptable to do in the name of that slogan. And like world peace, once you start specifying concretely exactly what it involves and how to achieve it, it becomes increasingly difficult to reach and to sustain a consistent and exclusive 'naturalism'.<sup>65</sup>

These are only a few of the many statements about the elusive meaning of the term 'naturalism'. What does this mean for our goal, namely that of shedding light on what naturalism is? I think what we should say is this. Even if 'naturalism' is an ambiguous term, that does not make our task of clarification impossible. If it is the case that the term 'naturalism' has different senses, that does not mean that we cannot disambiguate them and distinguish and discuss the different meanings of it that we have found – as we have been doing. In the remainder of this chapter and in the next chapter we will continue to organize and discuss these different definitions and so, in this way, at least attempt to understand what 'naturalism' really is.

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<sup>60</sup> Gasser (ed.) 2007: 5.

<sup>61</sup> Ibid.: 7.

<sup>62</sup> Talmont-Kaminski 2007: 187.

<sup>63</sup> Thompson 1964: 147.

<sup>64</sup> Talmont-Kaminski 2007: 187.

<sup>65</sup> Stroud 2004: 22.

After distinguishing different versions of naturalism, I want to draw attention to another factor that adds to the complexity of the issue, which is the fact that different philosophers have distinguished different varieties of (versions of) naturalism. Not only is 'naturalism' an ambiguous notion, and not only are there different versions of naturalism, but, on top of that, philosophers offer different distinctions between different varieties of naturalism, in particular these three:

- (i) Reductive and non-reductive naturalism;
- (ii) Weak and strong naturalism and
- (iii) Soft and hard naturalism.

One might think that such distinctions complicate the matter so much that it is beyond hope to straighten it out. However, there is reason to think that these distinctions do not complicate the matter any further. Why not? Well, close examination reveals that in each of the cases just mentioned, (i), (ii) and (iii), it turns out that one of the forms of naturalism actually does not seem to be a form of naturalism at all. In the remainder of this section I will discuss these three distinctions and show how one of the kinds of naturalism in each distinction is not a form of naturalism.<sup>66</sup>

First, there is the distinction between reductive naturalism and non-reductive naturalism. As Gasser puts it:

The position of reductive naturalism claims that a complete physics would provide all the ontological and explanatory means for understanding reality.<sup>67</sup>

Non-reductive naturalists want to preserve higher level phenomena instead, such as the mental, as a reality *sui generis*, which cannot be reduced to lower levels, for instance, the biological or physical one.<sup>68</sup>

According to reductive naturalism, 'a complete physics would provide all the ontological and explanatory means for understanding reality'. There are many definitions in our list that are very similar to this characterization of reductive naturalism. The clearest cases of this form of naturalism are: (M2), (P5), (P10) and (N8). Now let's look at non-reductive naturalism which 'want[s] to preserve higher level phenomena instead, such as the mental, as a reality

<sup>66</sup> The philosophers quoted in this section do not necessarily defend these positions and have not necessarily coined these terms.

<sup>67</sup> Gasser 2007: 10.

<sup>68</sup> Ibid.

sui generis, which cannot be reduced to lower levels, for instance, the biological or physical one'. There are no definitions in our list that are close to this formulation of naturalism. In fact, there are even a few definitions that contradict this supposed form of naturalism, for example: (M2), (M8), (M6), (P2), (P5), (P10) and (N15). Now, of course it is possible that in fact there are examples of non-reductive naturalism even though they are not on our list. But it is of some significance that we haven't found any examples of it, and it is presumably of more significance that we have found many definitions that contradict this supposed form of naturalism explicitly. This makes one think that, actually, non-reductive naturalism is not a form of naturalism at all – or, otherwise, (M2), (M8), (M6), (P2), (P5), (P10) and (N15) are not, unless, of course, there are explicitly contradictory views that the term 'naturalism' refers to, but despite the ambiguous nature of the term that seems rather unlikely.<sup>69</sup>

Papineau also thinks that non-reductive physicalism is not substantial and that 'there is room to query whether non-reductive physicalism amounts to a substantial form of naturalism'.<sup>70</sup> Why does Papineau think that non-reductive physicalism is not substantial? He points out that 'the requirement that some category of properties metaphysically supervenes on physical properties is not a strong one'. After all, we can even say of aesthetic and moral properties (as well as of mental properties) that they supervene on the physical, and these are the kinds of properties that most naturalists would love to exclude from existence altogether. As Papineau says: 'Supervenience on the physical realm is thus a far weaker requirement than that some property should enter into natural laws, say, or be analyzable by the methods of the natural sciences.'<sup>71</sup> As we have found, this kind of physicalism is not only weaker, but we should feel inclined to say that it is not a form of physicalism at all. We will therefore not adopt a definition of non-reductive naturalism. The only generic definition that we can extract, then, is a paraphrase of 'reductive naturalism':

(N22) The view that 'a complete physics would provide all the ontological and explanatory means for understanding reality'.

<sup>69</sup> Naturally, there are many inconsistencies between all the different versions of naturalism. What I am aiming at here, however, are explicit contradictions between definitions where one definition affirms a particular thesis and the other definition denies just this thesis.

<sup>70</sup> Papineau 2007. Papineau speaks here about physicalism. More specifically, he speaks here about ontological physicalism. This is, in our terminology, a form of ontological naturalism. This is why Papineau's position is relevant here, even though the use of different terms here appears confusing.

<sup>71</sup> Ibid.

Second, there is the distinction between hard naturalism and soft naturalism. Strawson has describes their respective meanings as follows:

Soft naturalism expands the notion of existence in such a way that it comprises notions of folk psychology and common sense.<sup>72</sup>

Hard naturalism attempts to view the world in an objective and detached light from the third person perspective.<sup>73</sup>

Hard naturalism seems to assign full cognitive value, or objectivity, to science alone.<sup>74</sup>

As Strawson puts it, hard naturalism ‘seems to assign full cognitive value, or objectivity, to science alone.’ Well, this is definitely a form of naturalism of which we have encountered instances in the list of definitions we found. Some of the definitions of naturalism that most clearly resemble this formulation of naturalism are: (N13), (N3), (N7), and (N19). However, it seems as though the category of definitions that Strawson calls ‘soft naturalism’, which ‘expands the notion of existence in such a way that it comprises notions of folk psychology and common sense’, is an empty category – at least no definition that we have found falls into it. Now, it goes without saying that there are probably more definitions of naturalism than we have found and it is possible that one of those is an example of ‘soft naturalism’. However, this would be more likely if there weren’t a couple of definitions in our list that more or less contradict this supposed form of naturalism, viz. (M7) and (P2). In fact, ‘soft naturalism’ does not seem to be a form of naturalism at all. From this distinction between different forms of naturalism we can only formulate one generic definition of naturalism, namely this formulation of hard naturalism:

(N23) The view that seems to assign full cognitive value, or objectivity, to science alone.

Third, there is the distinction between strong and weak naturalism. Here are two passages where Sukkop describes these two supposed varieties of naturalism:

Strong naturalism asserts that the distinction between nature and a realm over or beyond nature is preposterous.<sup>75</sup>

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<sup>72</sup> Gasser 2007: 11.

<sup>73</sup> Ibid.

<sup>74</sup> Ibid.

<sup>75</sup> Sukkop 2007: 79.

Weak ontological naturalism is compatible with supernaturalism. It does not explicitly eliminate any possibility of a “higher” realm, or fundamental other nature and habit, beyond our – by (natural) laws accessible – world.<sup>76</sup>

Strong naturalism ‘asserts that the distinction between nature and a realm over or beyond nature is preposterous’. Again, we can find many definitions that are instances of this form of naturalism: (M9), (P11), (P7), (N9), (N2), (N4), (N8), (N15) and (N14). But how about ‘weak naturalism’? Can we find any definitions that fall into this category? To recall, weak naturalism ‘is compatible with supernaturalism. It does not explicitly eliminate any possibility of a “higher” realm, or fundamental other nature and habit, beyond our – by (natural) laws accessible – world.’ Now, not only have we not found any examples of this kind of naturalism, we have, in fact, found several definitions explicitly denying that which according to this definition is not explicitly denied (i.e., the supernatural), viz. (N9), (N2), (N8), (N15), and (N14). It seems, again, that either the term ‘naturalism’ can refer to views that actually state explicit contradictions or that not all of these are forms of naturalism. It seems clear to me that we should go with the latter and say that weak naturalism is not really a form of naturalism at all. The only generic definition we can extract based on this distinction is then:

(N24) The view that asserts that the distinction between nature and a realm over or beyond nature is preposterous.

Fortunately, the different kinds of naturalism that some philosophers distinguish do not complicate the matter any further since, as we have seen, the distinctions aren’t distinctions within naturalism at all. This concludes our discussion of the broad application the term ‘naturalism’ enjoys and of the term’s elusive nature. We can now start our discussion of metaphysical naturalism.

### 3.4 DISTINCTIONS WITHIN METAPHYSICAL NATURALISM

We have seen that the distinction between metaphysical materialism and methodological materialism is very important. In the remainder of this chapter I will discuss metaphysical naturalism and in the next chapter I will discuss methodological naturalism. In the definitions of materialism, physicalism and

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<sup>76</sup> Ibid.

naturalism alike, we found several metaphysical definitions, or, as we said, definitions of views that we can characterize as metaphysical. Let's call these groups of definitions metaphysical-materialism for metaphysical definitions given of materialism, metaphysical-physicalism for metaphysical definitions given of physicalism and metaphysical-naturalism for definitions given of naturalism, respectively.

The next question that should be asked is whether, within the metaphysical definitions, the terms metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism pick out the same view or different views. In other words, is there some important distinction to be made between metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism, or are these terms merely interchangeable? On closer inspection, it seems apparent that there is no principled distinction between these terms. For example, according to (M<sub>3</sub>), (P<sub>4</sub>) and (P<sub>6</sub>) all that exists is 'matter'. According to (M<sub>8</sub>), (P<sub>3</sub>) and (N<sub>14</sub>), space-time and objects that exist in space-time are all that is real. (M<sub>9</sub>) and (N<sub>9</sub>) both exclude the supernatural from the real. Thus it seems that the key distinction to be made here is between metaphysical and methodological definitions and no further principled distinction needs to be made between definitions of metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism.

This conclusion, that there is no principled difference between metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism, finds some support in the literature. For example, Moser and Trout write: 'We shall use "materialism" and "physicalism" interchangeably.'<sup>77</sup> And Van Inwagen writes: 'The word "materialism" is often used as a name for the thesis I am calling "physicalism".'<sup>78</sup> Armstrong places 'physicalism' in parenthesis after using the word 'materialism'. There are also many philosophers who write on either materialism or physicalism and don't mention the other term at all. It seems that in doing so they aren't consciously ignoring an issue lurking in the background, but they simply assume or presuppose that these terms unproblematically refer to the same doctrine.

Horgan shares the opinion that 'physicalism' and 'materialism' are used interchangeably, which is how he uses the terms as well. He does point out, however, that there is a tendency to use the terms slightly differently; namely, to employ the term 'materialism' more generically and in a more inclusive way than the term 'physicalism', which is mostly used for psychophysical

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<sup>77</sup> Moser & Trout (eds.) 1995: 1.

<sup>78</sup> Van Inwagen 1993: 213.

identity theories.<sup>79</sup> It should be noted, however, that Horgan's remarks are of a descriptive rather than a normative character. Papineau's position comes close to this; he holds that the reasons for speaking of physicalism nowadays are (i) so there is less association with the historical concept of matter that has been left behind, and (ii) to stress the connection with physics and physical sciences.<sup>80</sup>

However, some philosophers do distinguish between what they call 'materialism' and 'physicalism'. Do they have the same distinction in mind that we just made, namely between metaphysical and methodological views, or do they think that there is a difference between metaphysical-materialism and metaphysical-physicalism? Crane and Mellor are some of the philosophers who think that the terms 'physicalism' and 'materialism' should be distinguished. As they see it, physicalism has descended from materialism, and they recognize that many physicalists regard their doctrine as a modern form of materialism, but according to Crane and Mellor, 'physicalism' and 'materialism' differ significantly. Materialism (in e.g. the seventeenth century) was a metaphysical doctrine that limited the natural sciences by its claim that matter had to be 'solid, inert, impenetrable and conserved, and to act deterministically and only on contact'.<sup>81</sup> However, the subsequent development of physics has shown that this conception of 'matter' is entirely inaccurate, matter has qualities very different from the ones the materialist claimed it to have. Modern 'materialists', i.e. physicalists, have likewise abandoned their former metaphysical view and now hold that the empirical world is made up of the matter a complete and true physics tells us it is made up of. Thus, according to Crane and Mellor, materialism and physicalism differ in the following respects: (i) Materialism is a metaphysical view, physicalism is not; (ii) Materialism limits science a priori, physicalism does not, (iii) Materialism is tied to a certain conception of matter, while physicalism is tied to the conception of matter that is based on the results of physical science.

The upshot of these three points is that materialism can be characterized by its concept of matter having a certain substantial content and that physicalism can be characterized by leaving it up to the physical sciences to provide this content. Now, while Crane and Mellor do identify a difference between two views, it is not between two metaphysical views, but rather between a metaphysical and a methodological view. That physicalism in their sense is not a metaphysical view is clear from (i), and that it is tied to a certain

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<sup>79</sup> Horgan 1994.

<sup>80</sup> Papineau 2001.

<sup>81</sup> Crane & Mellor 1990: 66.



methodology is clear from (iii). In short, Crane and Mellor do not give us a reason to make a principled distinction between two metaphysical views, i.e. within 'metaphysical naturalism', but merely reinforce the distinction we have already advocated, namely the one between metaphysical naturalism and methodological naturalism.

The distinction Crane and Mellor make can also be found in Bernstein, albeit in different terms. Bernstein makes a distinction between 'classical materialism' and 'scientific materialism'. He describes classical materialism as typically having a picture or a model of what matter is, namely that 'it consists of ultimate particles or atoms in motion. There are regularities of atoms in motion and it is the laws of motion that state what these regularities are.'<sup>82</sup> Scientific materialism is more 'sophisticated' and leaves the claims about the definition of the basic entities to science, since this is a scientific matter. The concept of matter that is characteristically used by the scientific materialist is described as 'general and open: one which can be given specification only as science develops'.<sup>83</sup> Except for the terminology, Bernstein's distinction is significantly similar to the one Crane and Mellor employ. And, just like them, rather than making a distinction between two metaphysical views, Bernstein is making a distinction between a metaphysical and a methodological view.

Thus, there seems to be no good reason to distinguish between metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism. Although there are obviously differences between the definitions given, these differences do not correspond to the terms 'materialism' and 'physicalism'. The main difference that we have found, which is also reinforced by the literature, is the difference between metaphysical and methodological definitions. Secondary differences can be found between the different metaphysical definitions. After all, even though all the metaphysical definitions tell us which kinds of things exist, they do not all agree on which those things or kinds of things are.

Now that we have seen that there are no principled differences between metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism, the question might rise why I have picked the term 'metaphysical naturalism' to cover all these terms. I have picked 'metaphysical naturalism' because I think that naturalism is a term that is often used in a wider sense than materialism and physicalism – note that I do not think that there is a differ-

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<sup>82</sup> Bernstein 2000: 202.

<sup>83</sup> Ibid.

ence in meaning, merely in use. Naturalism is often used to refer to or include metaphysical-materialism and/or metaphysical-physicalism. The same does not hold for metaphysical-materialism or metaphysical-physicalism. Since I want to talk about all these views, I think 'metaphysical naturalism' is the most appropriate term.

### 3.5 FOUR KINDS OF METAPHYSICAL NATURALISM

Even though there might not be any principled differences between metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism, that does not mean that there are not different versions of this theory. As is clear from the vast number of different definitions that we have found in the first section of this chapter, there are many different interpretations of metaphysical naturalism.

The metaphysical definitions of materialism, physicalism and naturalism that we have found can be organized into four different groups of very similar (or identical) definitions. Each of these groups means to provide an answer to the question which kinds of things exist, or, in other words, which kinds of things ultimate reality is made up of. Here are the four answers that metaphysical naturalism has to offer, i.e. here are four different kinds of metaphysical naturalism.

According to the first group, the 'material', or 'physical' (or 'matter') is all that exists. Definitions that fall into this category are the most by far: (M<sub>4</sub>), (M<sub>3</sub>), (M<sub>5</sub>), (M<sub>9</sub>), (M<sub>7</sub>), (P<sub>4</sub>), (P<sub>6</sub>), (P<sub>11</sub>), (P<sub>7</sub>), (P<sub>8</sub>) and (P<sub>1</sub>). I will call definitions of this type 'classical materialism'.

According to the second group, space-time and things in space-time are all that exist. Definitions that fall into this category are: (M<sub>8</sub>), (P<sub>3</sub>) and (N<sub>6</sub>). I will call this group of definitions 'spatiotemporal materialism'.

According to the third group, things that are causally efficacious are all that exists. A definition that falls into this category is: (P<sub>9</sub>). I will call this group 'causal materialism'.

According to the fourth group, the natural order is all that exists and nothing supernatural exists. Definitions that fall into this category are: (N<sub>9</sub>), (M<sub>9</sub>), (N<sub>2</sub>) and (N<sub>14</sub>).

Even though these four kinds of metaphysical naturalism do not have the same amount of 'members', they should still all be considered. After all, they all are, or have been, famous candidates for metaphysical naturalism and they have at different points in time all been the main kind of metaphysical

naturalism. In the remainder of this section, I will discuss each of these kinds of metaphysical naturalism and see what the arguments for and against these views are and if they are any good. The first kind of metaphysical naturalism I will discuss is 'classical materialism'.<sup>84</sup>

### 3.5.1 Classical Materialism

The most common kind of metaphysical naturalism is that the only thing that exists is the 'physical', the 'material', or 'matter'. This definition is not only the most common; it is also the most general. In fact, it is so general that without any further specification of the concepts 'the physical', 'the material' or 'matter', it is not much of a definition at all. After all, there is not much we can say about this kind of naturalism if we are not clear on what we mean by these concepts, or rather, if we are not clear on what it means for something to be material or physical. To press the point, maybe it would be fair to say that without any such conception we cannot understand or know what classical materialism is and thus it seems that no one could be in the epistemic position to legitimately adhere to it.

In the history of materialism, physicalism and naturalism, there have been several interpretations of the concept of 'the physical', or 'the material'. What does it mean for something to be 'physical' or 'material'? One interpretation is that for something to be physical it has to exist in space-time. This view is, as we labeled it, spatiotemporal materialism. Another interpretation of the concept of the physical is that the term 'the physical' only applies to things that are causally efficacious. We called this view 'causal materialism'. What other interpretations are there? One other interpretation is that 'the physical' has the same meaning as the classic term 'matter' has: solid, inert, homogeneous stuff that ordinary objects are made up of. I will call this view 'classical materialism'. Since I will discuss the other interpretations of the concept of the physical below, in the next two sub-sections, I will confine the discussion here to the last interpretation of the concept of the physical introduced: the view of classical materialism.

According to classical materialism, matter is solid and homogeneous, just as it appears to us to be in our pre-scientific common sense experience of

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<sup>84</sup> It might be confusing that the names of these forms of metaphysical naturalism have the term 'materialism' in them. However, I am using the names for the views that were used at the time the view was the dominant form of, the view we now like to call 'metaphysical naturalism'.

the world and the material objects around us. However, science has proven classical materialism long false and this interpretation of the physical is not available to us today. Here is a summary of the argument against classical materialism. Classical materialism is the view that everything is composed solely of atoms, or elementary particles. However, starting with Newton, this thesis has been challenged and has in fact been refuted. Newton introduced 'forces', but forces are not composed of particles. Later, Huyghens introduced 'waves' as an alternative for Newton's particle theory of light.<sup>85</sup> Waves are not composed of particles either. Recent research in quantum mechanics suggests that the number of particles there are is relativistic and also that the existence of particles is somehow dependent on observation.<sup>86</sup> In short, the thesis that everything is composed of particles is untenable if one is to take contemporary science seriously at all. Classical materialism should therefore be rejected as a tenable form of metaphysical naturalism.

This argument is not an argument against forms of physicalism according to which 'everything that exists is physical'. This is just an argument against the classical model of matter as particles. Ever since the refutation of this classical conception of matter, various other interpretations of it have arisen. I will now first turn to the interpretation that the physical is that which exists in space-time or: 'spatio-temporal materialism'.

### 3.5.2 Spatio-Temporal Materialism

The most famous kind of metaphysical naturalism is definitely spatio-temporal materialism. Spatio-temporal materialism is a form of metaphysical naturalism with a specific interpretation of the crucial concept of the physical/material. In the *Meditations*, Descartes proposes a definition which contends that something is material if and only if it is spatial, i.e. extended in space.<sup>87</sup> The property of spatial extension is the characterizing property of material substances, as opposed to mental substances which are characterized by the property of 'thinking'. Descartes' characterization of material substances as 'res extensa' has been of great influence, often said to be bad influence. There

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<sup>85</sup> Van Fraassen 2002.

<sup>86</sup> Ibid.

<sup>87</sup> Even though it seems right to say that this characterization of the physical goes back to Descartes, it can be questioned if there isn't a difference here, which is that Descartes is characterizing material *substances* as opposed to mental *substances*, and not 'matter' or physical *properties*.

are a number of arguments against spatiotemporal materialism and against the definition of the material as that which is extended in space (and time). Let's look at some of these arguments.

First, as Moser and Trout point out, the characterization of 'material' as that which is extended in space is not very helpful. Why do they think this not helpful? Here is what they say: 'The problem is that the relevant notion of spatial extension may depend on the very notion of material in need of elucidation.'<sup>88</sup> Now, if this is the case, circularity threatens: 'The main worry here is that the notion of spatial extension is actually the notion of something's being extended in *physical* space.'<sup>89</sup> Even if there is no strict conceptual circularity here, still the notions 'space' and 'spatial' are so closely related to the notion 'material' that it renders this interpretation at best uninformative.

Van Fraassen also argues against the interpretation of the physical as that which exists in space-time. One argument he gives is that the elementary particles that the Copenhagen interpretation of quantum mechanics recognizes are supposed to be physical, but they are not at all times fully located in space. Electrons are in fact 'going in and out of space' continuously. Are electrons therefore non-physical? They should be according to this interpretation of the physical. But, as Van Fraassen asks: do materialist want these kinds of non-physical 'substances' in their ontology? It seems not. Therefore, it seems best to reject the interpretation of the physical in terms of the spatio-temporal. Or, in Van Fraassen's terms: 'It seems better to conclude that the spatio-temporal location criterion does not match materialists' own understanding of their own thesis either.'<sup>90</sup>

Even though we often only believe things when we see them and extension and visibility are a necessary condition to see that something exists, extension is not a good interpretation of the concept of the physical.

### 3.5.3 Causal Materialism

The third kind of metaphysical materialism is 'causal materialism'. Even though we only have encountered one definition which makes this explicit, this is a version of naturalism that has been defended equally. There are two different versions of causal materialism. The first is more of a definition of the term 'physical' and contends that 'the physical' or 'the material' is that which is causally efficacious, or, an entity is physical iff it is able to exert causal influ-

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<sup>88</sup> Moser & Trout (eds.) 1995: 1.

<sup>89</sup> Ibid.

<sup>90</sup> Van Fraassen 2002: 53.

ence. The second version of causal materialism is more an ontology, according to it, an entity exists iff it is able to exert causal influence.<sup>91</sup> It seems that a true naturalist would endorse both these theses: that the only things that exist are physical things and that only physical things are able to exert causal influence. Papineau writes the following about this kind of naturalism:

The driving motivation for ontological naturalism is the need to explain how different kinds of things can make a causal difference to the spatiotemporal world. Thus many contemporary thinkers adopt a naturalist view of the mental realm because they think that otherwise we will be unable to explain how mental processes can causally influence non-mental processes. Similar considerations motivate naturalist views of the biological realm, the social realm, and so on.<sup>92</sup>

Another example of a philosopher who is a causal materialist in the second sense (i.e. only things with causal powers exist) is Armstrong. Here is what Armstrong says about causally inert objects:

If they are powerless in the space-time world, then whether they exist or whether they do not will make no difference to what happens in the space-time world. Are they not then useless postulations?<sup>93</sup>

He also writes elsewhere about these entities that ‘we have no good reason to postulate such entities’.<sup>94</sup>

There is a very good objection against this sort of view from Oliver, which I will discuss next. Oliver has pointed out correctly that what we are looking for is a reason to think that causally inert objects do not exist. To say that it ‘makes no difference to what happens in the space-time world’ whether or not they exist and to say that they are ‘useless postulations’ are not good reasons. After all, these reasons would only be good if it is assumed that if something does not do any explanatory work, then it should be said not to exist. However, there are two problems with this assumption. One is that it is based on bias to equivocate ‘existence’ and ‘exerting causal powers’. Why would one think that only causally efficacious things exist? As Oliver puts it, this is ‘nothing more than a prejudice’.<sup>95</sup> In fact, it is very problematic to think that only causally

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<sup>91</sup> Naturally, insofar as an interpretation of the concept of the physical is employed in a definition of naturalism these propositions would be equivalent. Taken out of such a context the latter claim is stronger than the former.

<sup>92</sup> Papineau 2007.

<sup>93</sup> Armstrong 1988: 104.

<sup>94</sup> Armstrong 1989a: 7.

<sup>95</sup> Oliver 1996: 8.

efficacious things exist when you consider the causally inefficacious things many people believe in such as sets, relations, numbers, etc. Second, we are interested in whether certain things (causally inert things) exist or not. Now, whether these things are unnecessary postulations in a metaphysical theory is quite beside the point. After all, we do not decide which things can, should, or in fact do exist. We might have a personal preference to exclude all causally inert objects, but we are not the ones calling the shots.

### 3.5.4 Anti-Supernaturalism

The fourth kind of metaphysical naturalism is slightly different in kind than spatio-temporal and causal materialism. Unlike those, this kind of metaphysical naturalism does not provide us with a particular interpretation of the concept of the physical or the material. Rather, anti-supernaturalism is an alternative to classical materialism and offers an alternative conception of which things exist. Instead of claiming that the only things that exist are physical things, like classical materialism, anti-supernaturalism claims that everything that exists is part of the natural order. As classical materialism introduced the problem of what it means for something to be physical, anti-supernaturalism hereby introduces the problem of what it means for something to be 'natural'. What does it mean for something to be 'natural'?

Here are a few options: (i) 'the natural' and the 'physical' have the same extension, (ii) 'the natural' is that which can be investigated using the 'natural sciences', (iii) 'the natural' is that which falls under 'natural laws', i.e. the laws of nature, or (iv) a combination of the above. Now, we have considered (i) when we considered the previous forms of metaphysical naturalism. We will consider (ii) when we consider methodological naturalism in the next chapter. If 'the natural' would have the meaning specified by (i) or (ii), then we have or will have discussed this view under the alternative headings just mentioned. However, what about (iii): what if 'natural' refers to 'that which falls under natural laws'?

If 'natural' refers to 'that which falls under natural laws', then the question emerges what natural laws are and which things are subject to them. Natural laws can either be interpreted as propositions or as something in nature that these propositions are about, but we cannot go into this issue too much, since this is a whole field of its own. But what we can say is that if (iii) is the right interpretation of the natural and the natural is 'that which falls under natural laws', then this interpretation of 'natural' can itself be reduced to either (i) or (ii). How?

Interpretation (iii) can be reduced to interpretation (ii) if we hold that laws

of nature are in a very crucial way related to and dependent on science, either in the sense that science discovers them, or in the sense that science formulates or postulates them. If this is the interpretation that should be used, then (iii) can be reduced to (ii). After all, science would play a crucial role when it comes to laws of nature and if only things that are subject to laws of nature exist, then science is again the standard for which things exist.

Interpretation (iii) can be reduced to interpretation (i) in an even more straightforward manner. After all: laws of nature are physical laws. This means that only physical things can fall under those laws. That which falls under natural laws, 'the natural', thus has the same extension as the physical, just like (i) says. This would mean that (iii) gets reduced to (i).

So, we have now reduced (iii) to (i) or (ii). What does this mean for anti-supernaturalism? First of all, since the concept 'that which falls under natural laws' reduces (iii) to either (ii) or (i), I think we are safe to say that anti-supernaturalism can be reduced to either one of two other kinds of metaphysical naturalism: classical materialism or methodological naturalism. Our discussion of these versions of naturalism thus also covers this version of naturalism. I will briefly sketch what that means. In the first case, 'the natural' would refer to that which falls under natural laws. As we have just seen, only physical things can fall under natural laws, since natural laws are physical laws. This means that this version of naturalism excludes not just possibly consciousness, but also math, logic and the normative domain. This result makes this version of naturalism very implausible. In the second case, if 'the natural' would be reduced to methodological naturalism, then it faces the same problems that methodological naturalism faces, which we will discuss in the next chapter. In this case, anti-supernaturalism would not be a form of metaphysical naturalism though. As we have just established, the metaphysical interpretation of anti-supernaturalism does not fare well.

There is another point worth making here, which is the following. Even though it is very hard to answer the question which things are subject to natural laws, it is easy to answer the question which things definitely do not fall under such laws and would be excluded from a view such as anti-supernaturalism. Such exclusion might, in fact, be what a view like anti-supernaturalism is hinting at. Now, which things would be excluded? One thing that would clearly be excluded is the supernatural order. After all, the supernatural, if it exists, is not subject to natural laws. As we can tell from the list of definitions that fall into this category of metaphysical naturalism (i.e. anti-supernaturalism), such exclusion is indeed the intention of this kind of naturalism. Some of the definitions are formulated in a positive way (i.e. the only thing that exists is the natural order) and some of them are formulated in



a negative way (i.e. there is no supernatural order), but in either formulation and in any case, one and the same view is expressed.

Rea has also discussed anti-supernaturalism, which, according to him, is the main kind of metaphysical naturalism. Even though this is the main kind of metaphysical naturalism, according to Rea, he is not so positive about this view. Rea calls anti-supernaturalism ‘terribly uninformative’:

Perhaps the only clearly formulated explicitly ontological thesis that all naturalists agree on is the terribly uninformative thesis that there are no supernatural entities. The reason this thesis is uninformative is that naturalists disagree about what it is for something to count as natural or supernatural. There are common paradigms: men, beasts, plants, atoms, and electrons are natural; God, angels, ghosts, and immaterial souls are supernatural. But even these paradigms are controversial; and, in any case, it is not clear what the items on each list have in common with their other list-mates that makes them examples of natural or supernatural entities.<sup>96</sup>

This leads him to conclude that anti-supernaturalism is not a tenable kind of metaphysical naturalism. Here is how he puts it:

The claim that there are no supernatural entities, therefore, will not do as a characterization of naturalism or any version thereof.<sup>97</sup>

Rea thus rejects anti-supernaturalism as a credible kind of metaphysical naturalism. It must be noted though, that Rea has an additional reason for rejecting anti-supernaturalism as a tenable kind of ontological naturalism, for Rea holds that:

More must be said if a clear position is to be articulated. At the very least, the claim must be supplemented by some account of what nature and supernature are like.<sup>98</sup>

This seems to open the door for a tenable version of anti-supernaturalism. However, Rea goes on to argue that this claim cannot be supplemented as such. Just why it cannot be supplemented as such requires a general discussion of the relation between metaphysical and methodological naturalism which will occur in section 4.5. There I will mention Rea’s argument for the claim that no supplement can be given to make anti-supernaturalism a better candidate for metaphysical naturalism.

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<sup>96</sup> Rea 2002: 55.

<sup>97</sup> Ibid.

<sup>98</sup> Ibid.

### 3.6 CONCLUSION

In the first part of this chapter, we started out discussing the term ‘naturalism’ and the closely related terms ‘materialism’ and ‘physicalism’. In section 3.1 we composed a long list of definitions of materialism, physicalism and naturalism. In section 3.2 we drew an important distinction between definitions that are metaphysical in nature and definitions that are methodological in nature. We called these groups ‘metaphysical naturalism’ and ‘methodological naturalism’ respectively. Here we also discussed whether ‘epistemological naturalism’ and ‘ontological naturalism’ should be distinguished as two additional versions of naturalism. We decided that one can draw this distinction, but that both epistemological and ontological naturalism remain sub-groups of metaphysical and methodological naturalism. In section 3.3 we discussed whether we should make even more distinctions, namely by recognizing varieties of naturalism such as reductive and non-reductive, weak and strong and hard and soft naturalism. After considering these distinctions, we concluded that they do not all concern genuine varieties of naturalism and, as such, do not have to be distinguished.

The second part of this chapter concerned metaphysical naturalism. We first considered whether metaphysical-materialism, metaphysical-physicalism and metaphysical-naturalism pick out principled different views within metaphysical naturalism, in section 3.4. We concluded that they do not and insofar as philosophers sometimes distinguish the terms ‘materialism’ and ‘physicalism’, they usually refer to the distinction we made, namely the one between metaphysical naturalism and methodological naturalism and not to a distinction between metaphysical views.

Next we moved on from discussing the term ‘metaphysical naturalism’ to the different views that this term refers to in section 3.5. We considered four forms of metaphysical naturalism in sub-sections: classical materialism, spatiotemporal materialism, causal materialism and anti-supernaturalism. We found that classical materialism has long been refuted by new developments in science, just like spatio-temporal materialism. We learned that causal materialism has recently been challenged by the physics of quantum mechanics and less recently by convinced interactionist dualists who make a case for mental causation. Finally, we saw that anti-supernaturalism is a form of naturalism in which the notion ‘laws of nature’ plays a crucial role, and, given the problems that rise with this notion, this form of naturalism is not very plausible.

We have to conclude, therefore, that metaphysical naturalism is not a tenable position. After all, all the candidates for this view have been refuted or declared irrelevant. We have to conclude, then, that the question whether

metaphysical naturalism is compatible with the subjectivity of experience does not rise here. After all, there is no consistent and relevant form of metaphysical naturalism for which we can consider this question.

If naturalism is a coherent position at all, it should be methodological naturalism and not metaphysical naturalism. In the next chapter, I will discuss methodological naturalism and see if that fares any better than its metaphysical counterpart. Then, in Chapter 5, I will turn to the question whether the subjectivity of experience is compatible with a form of naturalism that we have found to be tenable.

## Methodological Naturalism

This chapter is devoted to methodological naturalism and will provide an in depth discussion of the various interpretations of this view in search of a version of naturalism that is tenable. Since we established in the previous chapter that there is no form of metaphysical naturalism that is tenable, the burden now lies on methodological naturalism to be a tenable, i.e. coherent and not outdated, view. As we will see, despite a few problems of its own, there is a version of methodological naturalism that is coherent and acceptable. This will be the view that we will proceed with in Chapter 5 where we will consider whether the subjectivity of experience is compatible with that form of naturalism.

The first part of this chapter concerns itself with formulating a version of methodological naturalism. In section 4.1 I introduce the term ‘methodological naturalism’ and I discuss the various definitions of methodological naturalism that we found in the previous chapter. Then, in section 4.2, I will consider whether an important distinction needs to be made between the idea that methodological naturalism is a view and the idea that it is not a view but that it should be interpreted in an alternative way. I will discuss two such alternative interpretations, one according to which naturalism is a stance and one according to which naturalism is a research program, and consider if we should adopt one of these alternative interpretations of methodological naturalism.

The second part of this chapter concerns itself with the question whether the version of methodological naturalism that we formulated in the beginning of the chapter is tenable. Here I will discuss some of the main problems that face methodological naturalism. I will first focus on its most serious threat,

Hempel's dilemma, in section 4.3. I will then move on to two lesser issues that need to be addressed if naturalism is to be taken seriously, in section 4.4. As I will show, I think we can sidestep these problems and conclude that there is a tenable version of methodological naturalism that we can use in Chapter 5.

The third part of this chapter concerns itself with the ontological implications of methodological naturalism. If we want to be able to answer the question whether the subjectivity of experience is compatible with the tenable version of methodological naturalism that we found, then we need to know what the ontological implications of this view are: which kinds of things exist according to this view? In section 4.5, I will discuss the ontological implications of methodological naturalism in general and lay down the two main positions one can take on this matter and their most recent supporting arguments. In section 4.6, I will then turn to a discussion of science and the scientific method, since methodological naturalism is crucially committed to science and the scientific method. This discussion will lead to a discussion of the most important aspect of science and the scientific method, namely its objectivity, and to the ontological implications that this aspect of science and the scientific method has. At the end of this section we should have a pretty good grasp of the ontological implications of methodological naturalism such that we have a good basis to answer the question whether methodological naturalism is compatible with the subjectivity of experience.

In section 4.7, I will draw conclusions and summarize this chapter.

#### 4.1 DEFINITIONS OF METHODOLOGICAL NATURALISM

Not all definitions of methodological naturalism that we found are the same, which means that there are different kinds of methodological naturalism. In this section I will organize and discuss the different definitions of methodological naturalism.

We have found several methodological definitions of materialism, physicalism and most of all of naturalism. Just as in the previous chapter, where we considered definitions of metaphysical naturalism, for the definitions of methodological naturalism it also seems to be the case that, even though there are differences between the definitions, these differences are not bound to one of the particular terms 'materialism', 'physicalism' or 'naturalism'. In this case, even though there are different methodological definitions, the differences between them are not primarily between definitions of materialism, physicalism and naturalism. On the contrary, there are very similar or identical definitions of methodological materialism, methodological physicalism and methodolog-

ical naturalism. For example, (M2), (P5), (P10) and (N8) all claim that what exists is what the ideal physics will tell us that exists. In light of this, and given our finding in the previous section, it appears that the only major difference between definitions of materialism, physicalism, and naturalism is between metaphysical and methodological definitions. Just as we decided to call all of the views referred to by metaphysical definitions instances of ‘metaphysical naturalism’, we will identify the views referred to by methodological definitions as varieties of ‘methodological naturalism’. It is sufficient for a definition of naturalism to count as a methodological definition if it contains a reference to science or the scientific method.

The methodological definitions of materialism, physicalism and naturalism that we have found can be organized into two different groups of very similar (or identical) definitions. Each of these groups means to provide an answer to the question: which method should we follow to establish what exists? Or, in other words, which method should we follow to establish what ultimate reality is like? Here are the two answers that methodological naturalism has to offer.

According to the first kind, an ideal, completed physics will tell us what exists. Definitions that fall into this category are: (M2), (P5), (P10) and (N8). I will call this kind of methodological naturalism ‘ideal-physics naturalism’.

According to the second group, the scientific method, or the sciences, will tell us what exists. Definitions that fall into this category are: (M1), (N3), (N4), (N15), (N12), (N1), (N20). I will call this kind of methodological naturalism ‘scientific naturalism’.<sup>1</sup>

Ideal-physics naturalism specifies physics as the science that will tell us what exists, so, according to it, there is one science in particular, physics, that can provide an answer to the question what exists. According to ‘scientific naturalism’, not one science but sciences in general and in particular the scientific method will tell us what exists. Despite the fact that physics, as a science, falls under ‘the sciences’, I am here making a (temporary) distinction between ideal-physics naturalism and scientific naturalism to point out the difference between the idea of a particular science telling us what exists on the one hand, and the idea of ‘the scientific method’ telling us what exists on the other. However, as will be made clear right below, for practical purposes,

<sup>1</sup> This ‘scientific naturalism’ should not be confused with De Caro’s scientific naturalism. De Caro describes scientific naturalism as follows: ‘Scientific naturalism maintains the absolute ontological and epistemological primacy of the natural sciences as a whole, whether the other natural sciences are reducible to physics or not.’ (De Caro 2010: 366). As he says: ‘Scientific naturalism is a metaphilosophical view’ (ibid.). De Caro’s ‘scientific naturalism’ is, what I call, ‘philosophical naturalism’.

ideal-physics naturalism can and will be subsumed under (MN<sub>2</sub>). What is common to the definitions of methodological naturalism (some of which are quite vague) or, in other words, what methodological naturalism amounts to, is that science tells us all and only what exists.

There are four important points to be made regarding these definitions of methodological naturalism. First, even though we have organized these definitions into two different groups, there are still noteworthy differences between the definitions within each group. For example within ideal-physics naturalism some definitions refer to 'contemporary physics', while others refer to a 'completed physics'. This makes for two very different definitions and two very different kinds of methodological naturalism. However, I think that what these definitions have in common, namely their reference to 'physics', is even more important. This is why, for now, I think it is best to have these different definitions in one group. Within the definitions of scientific naturalism, the definitions seem to show even more differences. Each definition refers to science, but they all do so in a different way. To be more specific, these are their references: 'law of some science' (M<sub>1</sub>), 'the basis of science' (N<sub>13</sub>), 'science' (N<sub>6</sub>), (N<sub>13</sub>), (N<sub>17</sub>), (N<sub>18</sub>), 'natural sciences' (N<sub>4</sub>), 'integration with the core natural sciences' (N<sub>10</sub>), 'scientific method' (N<sub>15</sub>), 'physical and biological sciences' (N<sub>1</sub>), 'methods of science' (N<sub>20</sub>). Even though the vast differences between these definitions should be acknowledged, it needs to be pointed out that, despite these differences, they have more in common than they differ. After all, the scientific method could be regarded as the basis of science and as the core of science, so also of the natural sciences like physics and biology; the laws of science are closely related to its method, etc. I think we can put these definitions together into a single group in which references to 'science' or 'the scientific method' are central and the binding factor.

The second point that should be made about these two groups of definitions is that, as we anticipated before, they can be taken together to form one group; ideal-physics naturalism can be subsumed under scientific naturalism. I realize that I have just divided them up into two groups and there is a difference in focus between the two groups (as I have spelled out above). However, since physics is one of the sciences, ideal-physics naturalism can be regarded as a specific version of scientific naturalism. From here on I am assuming that ideal-physics naturalism falls under scientific naturalism and that everything that holds for scientific naturalism also holds for, or applies to, ideal-physics naturalism. That means that I will simply be speaking about methodological naturalism for sake of simplicity.

The third point that should be made is that there is an ambiguity in the literature when it comes to methodological naturalism. It is not clear whether

methodological naturalism provides us with a method to interpret the concept of the *physical*, or if it provides us with a method to determine which things *exist*. Now, often, in these contexts, 'the physical' and 'that which exists' are taken as synonyms, but of course they are not – at least, not in any way that does not express a certain bias in these contexts. The question is, then, whether we should interpret methodological naturalism as a view offering an interpretation of the concept of the physical or as a view specifying which things exist? I think that we should say that methodological naturalism offers a view about which kinds of things exist. One reason for thinking this is that it is an open possibility for future natural science to include things we now call 'mental'.<sup>2</sup> Since this is a possibility, we would be wise to define methodological naturalism as a view about which method should be used to find out which kinds of things exist so as not to end up in hopeless contradictions later which are solely the result of ill-chosen terminology. A second reason to think that it is better to think of methodological naturalism as a view about which kinds of things exist than as a view about the concept of the physical, is that there seems to be no reason for methodological naturalism to cling to the concept of the 'physical'. In its intensional sense, this concept has been written off (as we have seen in the last chapter) and there is no non-biased reason to identify the physical with that which really exists.

The fourth point that should be made is this. When we look at the version of methodological naturalism that we have found, there is one thing that is important to bear in mind. That is that it is not the scientist according to whom science or the scientific method are the ultimate criteria for which (kinds of) things exist. Scientists are more concerned with providing explanations for certain events and states of affairs that obtain in the empirical world, and with providing proof for the accuracy of these explanations. It falls beyond the scope of science to inform us about the ultimate nature of reality, namely those things reality is ultimately made up of. This is the task of philosophy, more in particular, of metaphysics. Mainstream contemporary analytic metaphysics has rejected several theories about which kinds of things exist: idealism (very few adherents at this time), neutral monism (always had very few adherents), dualism (better represented than previously mentioned views, but by far not as popular anymore as it once was) and metaphysical naturalism (classical materialism, spatiotemporal materialism, causal materialism). The only view that is seen as being in accordance with science, a view that is popular and enjoys many adherents, is methodological naturalism.<sup>3</sup>

<sup>2</sup> I will discuss this in more detail in section 4.3.

<sup>3</sup> Naturally, there are also neutral monists, idealists and dualists. However, most analytic



It is important to realize that philosophers are the ones who hold that the scientific method is the best method to be followed to determine which kinds of things exist. This is why methodological naturalism has also been called ‘philosophical naturalism’, for example by Papineau (2007), and why it has been regarded as a view about the practice of philosophy.<sup>4</sup>

Before concluding this section, I briefly want to compare my account of methodological naturalism to Rea’s account. As we established in the previous chapter, Rea does not think that different versions of naturalism should be distinguished, including methodological naturalism. Since we have already discussed his reasons for thinking this, I will not go into them again here. Rea does discuss what is usually considered to be methodological naturalism. Here are three definitions of methodological naturalism that he quotes:

Naturalism in philosophy is always first a methodological view to the effect that philosophical theorizing should be continuous with empirical inquiry in the sciences.<sup>5</sup>

Methodological naturalism holds that the best methods of inquiry in the social sciences or philosophy are, or are to be modeled on, those of the natural sciences.<sup>6</sup>

Methodological naturalism is the view that philosophy – and indeed any other intellectual discipline – must pursue knowledge via empirical methods exemplified by the sciences, and not by a priori or nonempirical methods.<sup>7</sup>

Since these definitions of methodological naturalism are very different from one another, Rea raises the question why they are all called methodological naturalism. This is his answer to that question:

I suspect that the reason for the overlap in labels is just that methodological assumptions generally are taken to be either background presuppositions about what the world

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philosophers these days want to be naturalists. Of course, just the fact that a view is popular at a given time and many people want to believe in it does not have any bearing whatsoever on its truth. I am at this point not arguing for its truth. I am merely illustrating how methodological naturalism, with all its references and connotations of science, is in fact a purely philosophical position. This is important to keep in mind.

<sup>4</sup> Papineau 2007. Even though methodological naturalism is sometimes called ‘philosophical naturalism’, I think that ‘philosophical naturalism’ is an alternative to both metaphysical and methodological naturalism and is not identical to either one.

<sup>5</sup> Definition from Leiter (1998) in Rea 2002: 64.

<sup>6</sup> Definition from Schmitt (1995) in Rea 2002: 64.

<sup>7</sup> Definition from Hampton (1998) in Rea 2002: 64. I have not adopted these definitions in our list of definitions of naturalism since these are all definitions of ‘methodological naturalism’, not of ‘naturalism’ simpliciter.

is like that guide and constrain the process of inquiry, views about how inquiry should be conducted, or views about what sorts of inquiry are likely to be fruitful. In other words, methodological assumptions generally are either metaphysical theses, theses about how inquiry in a particular discipline ought to be conducted, or theses about knowledge or justified belief.<sup>8</sup>

So, Rea seems to think that the term ‘methodological naturalism’ is kind of an umbrella term for ‘metaphysical theses’, ‘theses about how inquiry ought to be conducted’ and ‘theses about knowledge or justified belief’. Now, I agree with the second part of this claim, namely that methodological definitions usually specify a method for inquiry. However, according to the distinction between metaphysical and methodological naturalism that we used, methodological naturalism usually is not a ‘metaphysical thesis’, unless all that is meant by the term ‘metaphysical thesis’ is that a particular ontology is expressed. For ‘theses about knowledge or justified belief’ we reserved the term ‘epistemic naturalism’.

#### 4.2 METHODOLOGICAL NATURALISM: VIEW, STANCE OR RESEARCH PROGRAM?

So far we have assumed that, and talked as if, methodological naturalism is a view, or a thesis. However, it has been debated whether methodological naturalism should be understood as a view. Two philosophers in particular have argued that naturalism is not a view or a thesis but that we should employ an alternative interpretation. One of them is Rea, who argues that naturalism is not a view or a thesis but instead a research program. The second is Van Fraassen, who also thinks that naturalism is not a view or a thesis, but who does not think it is a research program either. According to Van Fraassen naturalism is a ‘cluster of attitudes’ or a ‘stance’. Now, are there good reasons to distinguish between methodological naturalism as a view or thesis on the one hand and methodological naturalism as a research program or a stance on the other? And if so, should we interpret methodological naturalism as a view, as a research program, or a stance? In the remainder of this section I will address these questions.

As we have seen before, Rea thinks that naturalism is not a metaphysical thesis, or a methodological or epistemological view. Rea thinks naturalism is not a metaphysical thesis since, if a naturalist wants to follow science wher-

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<sup>8</sup> Rea 2002: 64–5.

ever it leads, then he cannot be committed to any metaphysical theses. Rea thinks naturalism is not an epistemological view because the epistemological views that he considered are not characterizations of naturalism at all, just of a naturalized epistemology. Rea thinks naturalism is not a methodological view because all the characterizations of methodological naturalism that he considers can be reduced to either metaphysical naturalism or epistemological naturalism. Now, if naturalism is none of these, then what is it? According to Rea, naturalism is a 'research program'. What is a 'research program'? Here is Rea's definition:

A research program is a set of methodological dispositions – a way of conducting inquiry. One counts as a naturalist to the extent that one shares the relevant dispositions and conducts inquiry in the relevant way.<sup>9</sup>

Rea emphasizes that he is not the only one to proffer an alternative interpretation of naturalism as a research program, but according to him, also Sellars, Forrest and Giere hold a view like this.<sup>10</sup> Now, Rea thinks that naturalism is not just a research program, but he thinks that it is a shared research program. What is a (shared) research program? Rea uses this definition of an individual research program:

*Individual* research programs are maximal sets of methodological dispositions, where a set of dispositions is maximal just in case it is possible to have all of the dispositions in the set but it is not possible to have all of them and to have other methodological dispositions as well.<sup>11</sup>

And he gives the following definition of a shared research program:

*Shared* research programs are relevantly distinctive subsets of individual research programs.<sup>12</sup>

Why does Rea think that naturalism is not a view or a thesis but a shared research program? As he writes:

What unifies those that call themselves naturalists is not a particular philosophical thesis but rather a set of methodological dispositions, a commonly shared approach to philosophical inquiry.<sup>13</sup>

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<sup>9</sup> Ibid.: 66.

<sup>10</sup> See Rea 2002: 66.

<sup>11</sup> Rea 2002: 3.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.: 22.

And:

It seems most appropriate to characterize naturalism so that one counts as a naturalist only if one shares all of the methodological dispositions that are distinctive of it.<sup>14</sup>

Now, which methodological dispositions are distinctive of it, according to Rea? Those shared by Quine and Dewey, the two twentieth-century fathers of naturalism. Rea sums them up as follows:

High regard for science and scientific method, a disposition to employ scientific methods and results in all domains of inquiry as much as possible to the exclusion of a priori speculative methods, opposition to theories, particularly religious ones, that are untestable and do not play any significant role in filling out interstices of scientific theory.<sup>15</sup>

Given this description, one might wonder how this is different from the idea that naturalism is a methodological thesis. The difference is that what is described above is not a thesis or a view but rather a set of dispositions. This seems right. However, on Rea's view, it is a set of dispositions to employ a certain method 'as much as possible', namely the scientific method. Although I acknowledge that there is a difference between Rea's view in which the naturalist has a disposition to employ a certain method and the other methodological definitions of naturalism that we have seen, this difference doesn't seem to warrant not classifying Rea's account of naturalism as a methodological definition of naturalism. Let me explain.

It might be the case that this kind of definition does not present methodological naturalism as a view or a thesis, and it might even be true that naturalism is not a view or a thesis. But there is one important thing that naturalism as a methodological view and naturalism as a set of dispositions have in common, which is that both are methodological. That is: it is central to both that there is a reference to the scientific method as the method that will tell us which things exist. The difference between naturalism as a methodological view and naturalism as a methodological research program is how they relate to the scientific method. While naturalism as a view is committed to it, naturalism as a research program only has the disposition to accept it. Now, there is definitely a difference between being committed to a certain method and having the disposition to accept it: the latter is weaker. However, both do allow at least for a tentative crucial role to be played by the scientific method

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<sup>14</sup> Ibid.: 49.

<sup>15</sup> Ibid.

as their only criterion for leading us to ontological truth. For our purposes, we can therefore leave it unresolved whether methodological naturalism is, or should be seen as, a methodological view or as a methodological research program. We will build on their common ground, which is the fact that naturalism as a view and naturalism as a research program both are methodological and that either a weaker disposition to accept, or a stronger commitment to accept, the scientific method, is the central assumption of both accounts of naturalism.

I will now turn to Van Fraassen's position on this matter. Van Fraassen also thinks that materialism (our methodological naturalism<sup>16</sup>) is not a thesis, or a view, but he does not think that it is a research program either. Instead he thinks that it is a stance. His main motivation for this is Hempel's dilemma, which we will discuss in the next section. Here is what Van Fraassen writes:

If the "physicalist" or "naturalist" part of this philosophical position is mainly the desire or commitment to have metaphysics guided by physics, then it is something that cannot be captured in any thesis or factual belief. If the position does not mainly consist in such a desire or commitment, then what is it? This knowing how to retrench cannot derive from the substantiative belief which is (at that time) identified with the view that all is physical. So what does it derive from? Whatever the answer is, that, and not the explicit thesis, is the real answer to what materialism is.<sup>17</sup>

In the next section, we will discuss Hempel's dilemma in depth. For now, it is sufficient to notice that, according to Van Fraassen, materialism should not be identified with a thesis about what there is, but it should instead be taken as an 'attitude' or 'a cluster of attitudes', or 'a stance'. Instead of trying to get a grip on these notions in an abstract way, let's look at the characteristics this 'cluster of attitudes' or this 'stance' has according to Van Fraassen. The cluster of attitudes in question has the following characteristics:

- (i) A strong deference to the current content of science in matters of opinion about what there is<sup>18</sup>,
- (ii) An inclination (and perhaps a commitment, at least an intention) to accept (approximative) completeness claims for science as actually constituted at any given time.<sup>19</sup>

<sup>16</sup> The terms can be confusing, but 'materialism', as Van Fraassen uses it, is our methodological naturalism.

<sup>17</sup> Van Fraassen 2002: 59.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

It should be clear that (i) is very similar to methodological naturalism as we formulated it at the beginning of this chapter. Sentence (i) as well as the thesis of methodological naturalism is an ontological thesis according to which science tells us which things exist. The obvious difference is that, while methodological naturalism expresses a view or a thesis, sentence (i) does not since it does not express a commitment to science, but 'a strong deference to' science.

Just as is the case where methodological naturalism is considered to be a view, and just as in the case where methodological naturalism is taken to be a research program, also in sentence (i) the sciences and the scientific method play a crucial role. Again, the relation to the scientific method is different for each of these 'kinds' of naturalism; whereas the 'view-naturalist' is flat-out committed to the scientific method, the 'research program-naturalist' has the disposition to accept this method and the 'stance-naturalist' is *inclined* to accept the scientific method. Despite these differences in epistemic attitudes, the scientific method is of crucial importance to all of them. This means that we can leave the question whether or not naturalism is a thesis or a research program or a stance behind, and we can focus on naturalism being methodological and characterized by, minimally, an inclination to accept the scientific method.

In this section, we have considered whether we need to make an additional, possibly major, distinction, namely the distinction between the position that naturalism is a view and the position that methodological naturalism is not a view. In this case, we have found that the considered distinction did not need to be made, or rather, that the distinction can be made *within* methodological naturalism. Naturalism as a research program and as a stance can be distinguished, but they remain sub-groups of methodological naturalism. After all, a reference to the scientific method is sufficient for these definitions to qualify as definitions of methodological naturalism.

#### 4.3 HEMPEL'S DILEMMA

Methodological naturalism, like any other view, faces all kinds of issues. I will not address all of these issues and not all of them are relevant here, but there is at least one problem which is unavoidable and needs to be addressed, as it seems to arise as soon as one tries formulating the view. This first and biggest problem that methodological naturalism faces is 'Hempel's dilemma', which is a dilemma noticed by Hempel as well as by others. As Stoljar writes: 'Hempel's

dilemma has become, as Poland puts it (1994: 157) “the stock objection”.<sup>20</sup> In this section I will discuss Hempel’s dilemma and I will consider whether methodological naturalism can still be seen as a coherent and tenable view given this issue.

Hempel’s dilemma is based on the fact that the natural sciences are incomplete. Among others, Moser and Trout have discussed this issue. This is what it means for the natural sciences to tell us which things exist, according to them:

A predicate (such as “is an electron,” or “has spin”) signifies a physical item, on this view, if and only if the natural sciences, individually or collectively, rely on that predicate in the formulation of their explanatory theories.<sup>21</sup>

Now, what does it mean to say that the natural sciences are incomplete? In Moser and Trout’s terms again, this means that there are predicates that pick out something physical, which have not (yet) been adopted in the language of the natural sciences. The application of the predicate ‘physical’ to *x* is a sufficient condition for *x* to be physical, but it is not a necessary condition for anything to be physical since the predicate has not picked out everything that actually is physical (yet). The fact that the natural sciences are incomplete presents us with the following dilemma:

- (i) Either methodological naturalism should be restricted to the contemporary language of natural science, or:
- (ii) It should not be so restricted and instead tie its fate to the ultimate language of natural science. That is: the best, ideal, complete, finished language of natural science.

This dilemma has also become known as Hempel’s dilemma. I will give a short account of this dilemma first, after which I will present other philosopher’s accounts of it.

The first horn of Hempel’s dilemma is the option of a restricted methodological naturalism, which is confined to present-day natural sciences. Restricted methodological naturalism suffers from the same problem as classical materialism, namely the risk (and in the case of classical materialism the actuality) of becoming out-dated. Since there is a continuous development in the language of natural science, a form of naturalism this restricted is bound to be

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<sup>20</sup> Stoljar 2010: 97.

<sup>21</sup> Moser & Trout (eds.) 1995.

empirically refuted by the natural sciences themselves in only a short amount of time. To formulate methodological naturalism as such would make the position extremely vulnerable to refutation by new results of natural science. There is no way a restricted methodological naturalism could avoid this fate.

The alternative horn of the dilemma (ii) seems to be a better option, which is why many methodological naturalists wish to make their notion of 'the physical' dependent upon the results of the complete natural sciences. But this alternative faces serious problems too. The main problem is that the results the physicalist ties its fate to are, so far, a future dream, or maybe even worse, an unattainable ideal. For now, and maybe in principle, this kind of methodological naturalism finds itself without a definite, and possibly without a substantial, answer to the question what it means for something to be physical and also to the question which (kinds of) things exist. From here it only takes a small inference to the conclusion that methodological naturalism is a vacuous doctrine. Hempel's dilemma is a serious threat to naturalism.

This dilemma has not only been recognized by Hempel; others have made the same point in different contexts. I will now discuss a few other formulations of the same problem by McGinn, Van Fraassen, Chomsky and Crane, so that the scope of this issue will become apparent.

First I will discuss McGinn's take on the dilemma that rises for methodological naturalism. Based on this dilemma, McGinn argues that physicalism (our methodological naturalism) is a vacuous doctrine. McGinn draws a distinction between 'narrow' and 'wide physicalism'. Narrow physicalism asserts that 'consciousness is reducible to the properties *now* described in books of neurophysiology and physics.'<sup>22</sup> This position proves hard to defend, since it does not take into account that the natural sciences are not 'finished' and new laws and properties will be discovered or described. Like 'classical materialism', narrow physicalism will be refuted by the progress made in the natural sciences and will turn out to be empirically false. McGinn's 'narrow physicalism' clearly corresponds to the first horn of Hempel's dilemma, namely that of restricted methodological naturalism.

The alternative to 'narrow physicalism' is 'wide physicalism'. Wide physicalism is the doctrine that 'the mental is reducible to what would feature in an ideal theory of the world (don't say *physical* world).'<sup>23</sup> Wide physicalism corresponds to the second horn of Hempel's dilemma, namely that of future methodological naturalism. Now, McGinn argues that wide physicalism is vacuous. McGinn holds it is vacuous because he thinks that the mental can

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<sup>22</sup> McGinn 2004: 16.

<sup>23</sup> Ibid.: 17.



obviously be reduced to 'what would feature in an ideal theory of the world'. Naturally, in this kind of theory, there would be a place for the mental, and naturally 'mental terms' would have a part in that ultimate theory. We have no idea just what such an ideal theory of the world would look like, and how different the results of the natural sciences would be from their results now. But we do know that every new property or construct will be called 'physical' and this may include properties we now call 'mental' as well. The problem with 'wide physicalism', according to McGinn, is that it is so liberal that there is nothing informative to say about its actual content. The only thing we can say about it is that *if* it is the true theory of mind and world, then, trivially, that's what it is.<sup>24</sup> There does not seem to be a third alternative to both narrow and wide physicalism, which means that the physicalist either has to commit himself to a restricted view of what is physical or what exists, which will almost certainly be overturned by future science, or the physicalist has to admit that we don't know (yet) what the concepts of 'physical' or 'material' mean and so that it is unclear what his doctrine of physicalism really is.

The second person who has argued that materialism (our methodological naturalism) is a vacuous view is Chomsky.<sup>25</sup> Chomsky's argument is very similar to McGinn's, but Chomsky spends more time sketching the historical context of the development of the concept of the physical. Now, which development is this? Here is Chomsky's sketch. Chomsky parallels the development from spatial dualism, which reflects a common-sense understanding of the world, to the (post-) Newtonian situation with the shift that has taken place from a substantial version of the concept of the physical to a vacuous version of this concept. Spatial dualism was based on a mechanical account of the physical world, in which there was no room for properties or aspects that we would call 'mental properties', e.g. the property of language use, or 'thinking'. To account for these properties, a different kind of substance, i.e. a mental substance, was introduced. But with Newton's demonstration that the Cartesian account of the material world was wholly misguided and that material substances have 'ghostly' properties just like mental substances do,<sup>26</sup> the concept of the physical changed dramatically. Not only has the concept changed, with this change it has lost all its meaning. This is why, according to Chomsky, materialism in which this concept plays a crucial role has turned into a vacuous view. In Chomsky's words:

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<sup>24</sup> Ibid. Paraphrased.

<sup>25</sup> See Chomsky 1994.

<sup>26</sup> E.g. bodies can act at a distance.

These moves also deprive us of any determinate notion of body or matter. The world is what it is, with whatever strange properties may be discovered, including those previously called 'mental'. Such notions as 'physicalism' or 'eliminative materialism' lose any clear sense.<sup>27</sup>

As is clear, Chomsky's argument is very similar to McGinn's. Both McGinn and Chomsky think that 'the physical' will be an unhelpful notion in the future, since we do not know yet which properties natural science will discover. Even properties we now consider 'mental' may then be called 'physical'. Because the concept of the physical depends on future science for its spelling out, it is an empty concept, and the view based on it is therefore a vacuous view.

A third to discuss the same issue is Van Fraassen. Van Fraassen recognizes the dilemma that faces the materialist and offers the following neat summary of the issue:

When their [the physicalist's] most important terms are tied to current scientific theories, they [physicalists] must die with those theories; but if not, they [those theories] seem to lack content all together.<sup>28</sup>

According to Van Fraassen, there are two moves available for the materialist. Which moves? The first move that is open to the materialist, according to van Fraassen, is described in the following way:

Some have attempted to formulate very specific theses relating to the putative subject matter of psychology, argued that these are empirical, and offered the results as a specific version of materialism.<sup>29</sup>

By this cryptic description, Van Fraassen intends to say that what a materialist could do is to posit that type-type physicalism (according to which certain mental events are identical to certain brain states) is true and argue that this is a scientific, empirical thesis. It is not immediately obvious how this could be a move out of Hempel's dilemma for the materialist. I assume Van Fraassen means that a materialist could bite the bullet and present a form of reductionist psychology and argue that that is scientific or empirical. However, it seems that this option still falls prey to the first horn of the dilemma, which means that it could be overturned by future developments in psychology. It is thus not exactly clear how this would be a way out.

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<sup>27</sup> McGinn 2004: 17.

<sup>28</sup> Van Fraassen 2002: 53.

<sup>29</sup> Ibid.

Van Fraassen also thinks that this move does not work, for two reasons. First, Van Fraassen thinks that ‘mental’ or ‘psychological’ events are not the only problems for a materialist: they have many other things to worry about, such as ‘that a person has a purpose’, ‘that her sins are forgiven’, etc.<sup>30</sup> Second, he thinks that this move will not help the materialist because the empirical claim(s) of type-type physicalism might turn out to be false, and then the question that rises is, of course, whether the materialist will then accept his position to be proven false or whether there will be, as Van Fraassen calls it, a fallback position which is ‘the real materialism after all’.<sup>31</sup>

What is the second way out for the materialist, according to Van Fraassen? The second move that is open to the materialist is to follow science wherever it leads. According to Van Fraassen, this is mostly done in the way in which, for example, Smart does this. Here is Smart’s definition of materialism:

By materialism I mean the theory that there is nothing in the world over and above those entities which will be postulated by physics (or, of course, those entities which will be postulated by future and more adequate physical theories).<sup>32</sup>

Now, the obvious problem with this ‘move’, as Van Fraassen points out, is that no one knows what a future physics might postulate. Moreover, it seems that Smart, like others who defend a similar thesis, wants to introduce some amendments that rule out the existence of emergent properties from the start – which is obviously incompatible with the definition we have just considered. For these reasons, Van Fraassen concludes that this move is not open to the materialist either.

It seems to me that these two ‘moves’ that Van Fraassen discusses that could help the materialist, when he finds himself confronted with Hempel’s dilemma, in fact are a reformulation of exactly Hempel’s dilemma. That is, to me these ‘moves’ do not seem solutions but a formulation of the problem.

After criticizing both moves, Van Fraassen goes on to ask the question what is really involved in materialism, given the fact that materialists can change the content of their doctrine and supposedly know ahead of time that the development of science will be in line with that which is ‘materialistic’ (whatever that means). Hempel’s dilemma is one of the main reasons why Van Fraassen thinks that materialism is not a substantial thesis or view, and, in fact, not a view or thesis at all, as we have discussed in the previous section. So, although Van Fraassen sees the same problem for the materialist as McGinn,

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<sup>30</sup> Ibid.: 54.

<sup>31</sup> Ibid.: 55.

<sup>32</sup> Van Fraassen 2002: 56.

he does not declare materialism a vacuous doctrine. Instead, he argues that materialism is not a doctrine at all.

Hempel's dilemma, which, as we have seen, has not only been noticed by Hempel, is one of the most serious threats for methodological naturalism. The first horn of the dilemma does not seem an option at all. Can one accept the second horn of the dilemma, without needing to believe methodological naturalism is a vacuous doctrine or no doctrine at all? Well, basically, the naturalist is going to have to choose one of the horns or the dilemma and even though they are both not perfect, they are both tenable. If the naturalist accepts the first horn of the dilemma and interprets 'natural sciences' as the current natural sciences, then he does hold a tenable position. Granted, it is a position that can and most likely will be overruled in the future. In that case he might either stick with his out-dated view or update his view to be in line with the then-current natural science again. In any case, his position at any given moment is tenable. If the naturalist accepts the second horn of the dilemma and interprets 'natural sciences' as complete natural sciences, then, for now, he will base his view on contemporary natural science but is willing to substitute this for the results of complete natural science when they are available. This position is also a tenable position, though maybe not a very desirable one.

Another point that should be made is the following. This dilemma is foremost a problem for the naturalist, who will have to decide which horn of it to embrace. Yet, it is not so much a problem for us, for two reasons. One, either one of these interpretations of naturalism is tenable (albeit problematic, possibly) and all we need is a tenable position of naturalism for which we can investigate whether it is compatible with the subjectivity of experience. Second, whichever horn of the dilemma the naturalist embraces, both forms contain the crucial element which is the commitment to science. For our purposes, it can be sidestepped whether science should here be interpreted as current science or as future science. Most important is to note that methodological naturalism is committed to science and the scientific method. Knowing that methodological naturalism is a tenable position, which is committed to science and the scientific method, gives us enough in hands to consider whether it is compatible with the subjectivity of experience.

## 4.4 TWO OTHER PROBLEMS

Hempel's dilemma is not the only problem that arises with the formulation of methodological naturalism. There are at least two more problems, which I will discuss in this section.

The second problem that pops right up with the formulation of methodological naturalism has been expressed by Crane and Mellor. Crane and Mellor's point is that there is a problem with the term 'natural sciences'. Their question is: what counts as a natural science? Physics surely does, and chemistry; molecular biology and neurophysiology do too but social sciences among which psychology fall beyond their scope. Crane and Mellor's problem is that there is no justifiable reason why psychology should not be considered to be a natural science. They argue for this claim in the following way.

The reason why psychology is excluded from the natural sciences is not because it affirms the existence of mental substances. According to Crane and Mellor, the distinction between a mental and a physical substance is irrelevant, since what the difference comes down to is their different essential properties, respectively thinking and being extended. The reason why psychology is excluded from the natural sciences is, then, that thinking is not a physical property. Crane and Mellor's question then becomes *why* thinking is not a physical property. And even if it is not, then it still seems that the exclusion of psychology from the natural sciences is solely a matter of bias. As Crane and Mellor put it:

What, if not the metaphysics of materialism, prevents the empirical psychology of thought, and of other mental phenomena, adding in its own terms, as physics does, to our inventory of what there is?<sup>33</sup>

To repeat their point: why do physics and chemistry and biology have the authority to determine which ontological claims are true, and why doesn't psychology have that same authority? Why is it not acceptable if psychology describes in its own terms (i.e. not only or not at all using the term 'physical') which things exist? Crane and Mellor think that psychology is taken to be epistemically suspicious exactly because its subject matter is not physical. But such a *prima facie* exclusion of psychology is sheer prejudice.

I will not discuss the scientific status of psychology in depth, since this is not only a complicated but also a major issue requiring more analysis than we

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<sup>33</sup> Crane & Mellor 1990: 66. Crane & Mellor's materialism is 'classical materialism' or old versions of materialism.

have space for here. I think the best reply to Crane's argument, though, is to say that the reason why psychology is not always, or not usually, considered a natural science is not because 'thinking' is not considered a physical property. I think the reasons for its exclusion are more often based on a (at least perceived) difference in methodology between certain areas in psychology on the one hand and the natural sciences on the other. As I will argue later on in this chapter, scientific statements are such that they should be capable of test and they should be such that scientists could reach agreement over them. Naturally, a lot of research that is done in psychology meets these standards for objectivity, which I will spell out in section 4.6, but I suspect that the reason that psychology is not always considered a natural science might be that not all areas of psychology are thought of as meeting these standards.

Elsewhere, Crane has brought up yet another issue with the formulation of methodological naturalism. This third issue is closely related to Hempel's dilemma, yet raises a slightly different point. Crane's problem here concerns the development of future physics. This is how he describes the problem:

If current physics develops in certain unforeseeable ways, then how can physicalism be defined now in such a way as to rule out the mental? Perhaps physical science can be defined as the final theory of everything. But if it turns out that irreducible psychological properties are appealed to in the final theory of everything, then the mental will once again count as physical by mere definition.<sup>34</sup>

There are two things that should be said in reply to the future possibility that natural sciences will include 'mental' things, as discussed by Crane, and earlier by McGinn and Chomsky. First of all, this is a good argument against calling the view that might have such a future 'materialism' or 'physicalism'. After all, if we stick to this terminology and the view will include 'mental' things, it will become a *contradictio in terminis* and nobody will want to adhere to it. This is the reason why we have chosen to talk about 'metaphysical naturalism' instead. Second, this is a good argument in favor of formulating methodological naturalism as the view that holds that the scientific method will tell us which things exist, instead of saying that methodological naturalism is the view that holds that the scientific method will tell us what it means for something to be physical. We have made this distinction in Chapter 2 and it is important here. If one thinks that methodological naturalism will someday tell us what it means for something to be physical, and it will include

<sup>34</sup> Crane 1993: 480. Pettit has taken up Crane's challenge to come up with a definition of physicalism that is neither too restricted nor too liberal (Pettit 1993), but Crane has argued that this definition fails (Crane 1993b).

things we call 'mental', then the same contradiction occurs. However, if we think methodological naturalism will simply tell us which things exist, there would be no contradiction whether these things would be mental, physical or neutral in nature (or any combination of the above).

Now, given these two points, there is no problem anymore for methodological naturalism to include mental things in the future. It would be great if it were to turn out that the 'mental' is a natural phenomenon that can have its place in a theory of everything, even if we cannot envisage such a theory now. Even stronger, it seems that we actually want that which we now call 'the mental' to be part of the phenomena covered by our ultimate theory. After all, don't we aspire to an ideal theory of everything?

#### 4.5 DOES METHODOLOGICAL NATURALISM ENTAIL METAPHYSICAL NATURALISM?

We have now found a tenable and credible version of naturalism: the kind of methodological naturalism that we have formulated above. If we want to be able to answer the question whether the subjectivity of experience is compatible with this tenable version of methodological naturalism that we found, then we need to know what the ontological implications of this view are: which kinds of things exist according to this view? There are different things to say about the ontological implications of methodological naturalism. An important question is what the ontological implications of science and the scientific method are, which I will discuss in the next section. In this section, I want to focus on the question whether methodological naturalism entails metaphysical naturalism, or, in other words: whether 'naturalism' entails 'physicalism' or 'materialism'?

If one is a methodological naturalist, and thinks, for example, that science will tell us which kinds of things exist, then does this imply that one is a metaphysical naturalist who thinks, for example, that everything that exists is in space-time? We have already concluded that the four forms of metaphysical naturalism that we distinguished should be rejected. However, it might be the case that our discussion of methodological naturalism leads us right back to metaphysical naturalism. Maybe one cannot be a methodological naturalist without being a metaphysical naturalist?

There are at least two views that are represented in the literature concerning the relation between methodological naturalism and metaphysical naturalism. It should be noted that the relation is often described as the relation between

‘naturalism’ on the one hand and ‘materialism’ on the other, or as the relation between ‘methodological’ and ‘ontological’ naturalism, but in each of these cases it is clear that this distinction amounts to our distinction between methodological and metaphysical naturalism. Here are the two possible positions to take regarding this relationship:

- A. Methodological naturalism is ontologically neutral regarding metaphysical naturalism.
- B. Methodological naturalism is not ontologically neutral regarding metaphysical naturalism.<sup>35</sup>

Both these views are and have been defended in the literature. Among others, defenders of view A are: Papineau, Brandl, Rea and Ritchie. In Rea’s terms, naturalism as a research program is not committed to the doctrine of materialism – just the contrary:

My goal is to show that commitment to naturalism forces one to reject both realism about material objects, and materialism.<sup>36</sup>

Ritchie makes a similar point in his recent book *Understanding Naturalism*. As he writes:

There is no general metaphysical picture that our best science supports. Add to that the fact that it is not clear what physicalists mean by physics in the first place, then the best attitude a naturalist can take may be one of metaphysical agnosticism.<sup>37</sup>

Another recent example of someone who defends view A is Brandl (2001). I will not consider his argument in depth here, but I do want to discuss it briefly, mainly as an illustration to, and enhancement of, our understanding of position A. In his paper, Brandl claims that naturalists are only committed to physicalism as understood by the logical positivists, who think, according to Brandl, that ‘physicalism is just a methodological rule about how to formulate the evidential base on which scientific theories rest’.<sup>38</sup> Brandl thinks that the idea of the logical positivists and Quine about naturalism is that naturalism should not go beyond science in stating any metaphysical claims. However, Brandl thinks that physicalism as we understand it now (which is the view that

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<sup>35</sup> Moser & Trout (eds.) 1995: 12.

<sup>36</sup> Rea 2002: 77.

<sup>37</sup> Ritchie 2009: 158.

<sup>38</sup> Brandl 2007: 253.



we have called ‘metaphysical naturalism’) is such a metaphysical claim. Brandl argues that naturalists should remain neutral when it comes to ontological positions and the mind-body problem, just as the logical positivists and Quine intended it to be. I will comment on this argument below, after looking at the argument from defenders of position B.

Among the recent defenders of position B are Armstrong, and Gasser and Stefan. Armstrong’s view is that materialism (what we have called metaphysical naturalism) is part of the doctrine of (what we have called methodological) naturalism. According to Armstrong, naturalism is the doctrine that ‘reality consists of nothing but a single all-embracing spatio-temporal system’.<sup>39</sup> Materialism, naturalism and also realism rest on a common basis, according to him, which is that the natural sciences provide the best guide to the nature of reality.

A recent argument for position B is given by Gasser and Stefan (2007). I will not consider their argument in detail, but I will nevertheless mention it as an illustration of position B. Gasser and Stefan take the view that being a methodological naturalist commits one to metaphysical naturalism. They make this claim because they think that, ontologically, neutral naturalism is ‘unsatisfying from a philosophical point of view’. Gasser and Stefan find this position unsatisfying because at some point, if one accepts scientific realism (and the idea that scientific explanations bring ontological commitments), a tension will rise between the different causal claims and the different scientific explanations. Now, because of the tension that arises, one can only temporarily take up a neutral position, but if one is to take science seriously, at some point one has to take a position. As they put it:

Because it has proven to be difficult to provide a convincing way to evade the tensions between different causal stories at the various levels of reality, we assume that an ontological neutral position can only be provisional for naturalism. (...) [I]f it is believed that scientific concepts and hypotheses refer to something real, then methodological and epistemological issues are closely intertwined with ontological assumptions.<sup>40</sup>

This is why Gasser and Stefan draw the conclusion that if one takes science seriously (and is a scientific realist), ontology is a central issue for naturalists. Since science makes claims about the causal efficacy of objects, scientific theories implicitly raise ontological questions. Ontology is thereby ‘a central issue for naturalism’.<sup>41</sup>

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<sup>39</sup> Armstrong 1980: 35.

<sup>40</sup> Gasser and Stefan 2007: 161.

<sup>41</sup> Ibid.

Now, who is right, Brandl or Gasser and Stefan? I think we should say that they are both right. How can they both be right? Well, I think they do not disagree with each other in the first place. Let's look at Brandl's argument again: the only thing Brandl claims here is that naturalism cannot go 'beyond science'. Therefore, before we have seen the results of science, we cannot commit to a particular ontology. In other words: naturalism is not and should not be committed to a particular ontology *a priori*. However, when the results of science are in, then naturalism can and will catch up with science and present an ontology based on the findings of science. So, in short, even though there is and should be no *a priori* commitment to a particular ontology (e.g. dualism or naturalism), naturalism will in fact proffer an ontology, following science. It is not the case that naturalism will remain completely neutral concerning ontology, in the sense that naturalists won't care about ontology. Naturalism, according to Brandl, should only stay neutral to begin with and it should not, without consulting science, take sides with for example, dualists, physicalists, neutral monists or idealists.

Does this contradict Gasser and Stefan's position? It does not. Gasser and Stefan do not claim that naturalism should commit to a particular ontology, like dualism or physicalism or neutral monism, without being led to this decision by science. They do not think naturalists should commit themselves to a particular ontology *a priori*, and they do not think naturalists should go 'beyond science'. The only point that Gasser and Stefan make, is that naturalism is *not* completely ontologically neutral in the sense that *when* the results of science are in, the naturalist is committed to the ontology that science proffers (if they want to take their commitment to the scientific method seriously). So, naturalists should take science seriously enough not to commit to a particular ontology *a priori* and seriously enough not to ignore the results of science and not care about ontology at all. Is this position different from Brandl's? Not so much: Brandl and Gasser and Stefan seem to agree at this point.

Does this mean that there is no difference between positions A and B? No, there very well can be a difference. For example, some philosophers think that methodological naturalism is *a priori* committed to metaphysical naturalism; for example Armstrong thinks this. This means that for Armstrong and like-minded philosophers, position A and B are very different and, in fact, opposed to one another. Armstrong would thus not agree with Brandl but maintain that methodological naturalism is committed to metaphysical naturalism. And Armstrong is not alone in thinking this. When we discussed definitions of metaphysical and methodological naturalism, we noticed that there are some definitions according to which naturalism is not either a metaphysical or a methodological thesis but a combination of both. Often the metaphysical and

the methodological are regarded as components or elements of a combination view which is called naturalism. Now, since the terms materialism, physicalism and naturalism are so closely related and often refer to the same view, it is not surprising that methodological naturalism and metaphysical naturalism are often seen as part of the same package.

This is even more interesting when one realizes that there are also philosophers who hold a position centrally opposed to Armstrong's. For example, Rea argues that methodological naturalism and metaphysical naturalism aren't even compatible. Since this is so interesting, I will briefly consider how Rea thinks that methodological and metaphysical naturalism are incompatible. Well, methodological naturalism entails a commitment to science and to following science wherever it will lead. Since we don't know now where science will lead in the future (e.g. maybe someday science will posit mental objects), this means that this commitment is incompatible with a commitment to any particular metaphysical theses, such as 'there are no emergent properties' or 'there are no mental objects'. These theses are just examples, but Rea's point is: methodological naturalism is not compatible with any metaphysical theses at all, since it is a contradiction to follow science wherever it will lead *and* beforehand already draw limits by posing theses where science cannot lead. If one is a true methodological naturalist, so argues Rea, one therefore cannot be a metaphysical naturalist. The methodological naturalist needs to follow science wherever it will lead him, even if someday it will lead him to accept emergent properties or mental objects (or whatever else). He cannot decide already that in fact science is limited by all these metaphysical theses he would like to hold on to. And if the methodological naturalist would choose to do the latter, and formulate ontological theses that he absolutely does not want to part from, then this makes him a metaphysical naturalist rather than a methodological naturalist. Rea's point is that one cannot be seriously committed to both at the same time and be a methodological and metaphysical naturalist. Here is the issue in Rea's words:

But to say this [naturalists at present are committed to certain ontological theses] is not at all to say that any of those theses are adequate as definitive statements or characterizations of naturalism. They are not because, like any substantive thesis about what there is, they are not the sorts of theses that one could unconditionally endorse while at the same time following scientific investigation *wherever* it might lead. So no substantive ontological thesis will do as a characterization of any version of naturalism.<sup>42</sup>

This is also Rea's reason for thinking that no supplement can be given to the anti-supernaturalist thesis of the metaphysical naturalist. Because, however

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<sup>42</sup> Rea 2002: 56.

the anti-supernaturalist would interpret the terms ‘natural’ and ‘supernatural’, this would betray an ontological commitment that one cannot have if one is also a methodological naturalist. Note how this is not an argument against anti-supernaturalists who do not claim to be methodological naturalists as well.

Armstrong and Rea thus defend positions that are diametrically opposed, so there remains plenty of disagreement on this issue. The most important aspect of this debate for our interests is the fact that, even if methodological naturalism is not in principle committed to *one particular* ontological position, it is nevertheless committed to *an* ontology. Since methodological naturalism is committed to an ontology, the question arises: to which ontology? Because methodological naturalism is committed to science and the scientific method, this seems the right place to start looking for the kind of ontology that methodological naturalism is committed to. This will be the topic of the next section.

#### 4.6 THE OBJECTIVITY OF SCIENCE

Since we want to be able to answer the question whether the subjectivity of experience is compatible with methodological naturalism or not, we need to know more specifically what methodological naturalism amounts to. We started this chapter by considering a number of definitions of methodological naturalism and found that, according to these definitions, science tells us which things exist. Thus, in order to learn more about whether the subjectivity of experience is compatible with methodological naturalism, we’ll need to know which things (can) exist according to science. And for that, we need to figure out what science is.

What is science? Needless to say, this question is not easy to answer and has been asked for thousands of years. However, attempts have been made to say what science is. For example Quine describes science as follows:

Our word ‘science’ comes from a Latin word for knowledge. Much that we know does not count as science, but this is often less due to its subject matter than to its arrangement. For nearly any body of knowledge that is sufficiently organized to exhibit appropriate evidential relationships among its constituent claims has at least some call to be seen as scientific. What makes for science is system, whatever the subject. And what makes for system is the judicious application of logic. Science is thus a fruit of rational investigation.<sup>43</sup>

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<sup>43</sup> Quine 1978: 3.

The details of this description will be discussed later on in this section, but for now we should continue with the big picture. Often a distinction is made between natural sciences, social sciences and humanities.<sup>44</sup> Despite the differences between natural and social sciences and humanities, they have a common objective. Which objective is this?

The natural and social sciences and the humanities are all part of the same human endeavor, namely systematic and critical investigations aimed at acquiring the best possible understanding of the workings of nature, man, and human society.<sup>45</sup>

Gorham has pointed out that ‘there is little agreement among philosophers about what science is for or what it has achieved.’<sup>46</sup> But for a scientific realist, whose point of view we’ll adapt here<sup>47</sup>, the point of science is to understand and give an account of the world. According to scientific realism ‘modern scientific theories provide a true (or approximately true) account of the world’.<sup>48</sup>

So, science is a system that aims to provide a true account of the world. However, not only science tries to provide a true account of the world, but so do many religions, and also cults, astrologers and tea-leaf-readers. These alternative accounts of the world are possibly also systematic. In this light, Quine’s description of science thus seems too broad, including possible systematic but non-scientific accounts of the world. The following question then presents itself: What is distinctive about science? This question is central in the debate about the demarcation between science and pseudo-science. Over time, several criteria for such a demarcation have been proffered. The logical positivists, for example, proffered that the criterion for a statement being scientific is that the statement can be verified:

The basic idea was that a scientific statement could be distinguished from a metaphysical statement by being at least in principle possible to verify.<sup>49</sup>

Popper has proffered a demarcation criterion along the same lines:

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<sup>44</sup> There is debate about how exactly to distinguish the natural sciences from the social sciences and the social sciences from the humanities, but I cannot go into this matter any further here since it is a huge debate in its own right.

<sup>45</sup> Quine 1978: 3.

<sup>46</sup> Gorham 2009: 88.

<sup>47</sup> The argument for scientific realism is that science is so successful and the best explanation for its empirical and technological success is that it is true.

<sup>48</sup> Gorham 2009: 90.

<sup>49</sup> Hansson 2008.

Statements or systems of statements, in order to be ranked as scientific, must be capable of conflicting with possible, or conceivable observations.<sup>50</sup>

Both of these demarcation criteria have been criticized and others have been proffered in their stead. In “Science and Pseudo-science” Hansson concludes with the following description of the distinctiveness of science:

Science is a systematic search for knowledge whose validity does not depend on the particular individual but is open for anyone to check or rediscover.

So, for any theory to be scientific, it needs to be systematic and it needs to meet certain standards. How is the application of these standards in scientific research guaranteed? The application of these standards in scientific research is guaranteed by means of the universal method that sciences employ in their research: the scientific method. Science is thus a systematic account of the world, and the fact that it is systematic can be further spelled out in the sense that its distinctive scientific character is guaranteed by the application and use of the scientific method. In order to determine which things exist according to science, we need to learn more about the scientific method. What is the scientific method?

Just like the question ‘What is science?’ is not easy to answer, the question what the scientific method exactly is, is not easy to answer either. Rea writes the following about the methods of science:

Notoriously, it is hard to say exactly what methods are supposed to count as *the* methods of science. But I think we will do well enough for present purposes if we say that the methods of science are, at the present time anyway, those methods (including canons of good argument, criteria for theory choice, and so on) regularly employed *and respected* in contemporary biology, chemistry, and physics departments. Reliance on memory and testimony is included in the methods of science, as well as reliance on judgments about apparent mathematical, logical, and conceptual truths.<sup>51</sup>

This gives us a first idea what the methods of science are. Ritchie offers the following answer to the question what is distinctive about science and its method:

Traditional philosophy of science has offered us two very general answers to what is distinctive about science and its method – inductivism and hypothetico-deductivism.<sup>52</sup>

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<sup>50</sup> Popper 1962: 39.

<sup>51</sup> Rea 2002: 67.

<sup>52</sup> Ritchie 2009: 74. This formulation of the scientific method leaves room for the possibility of it changing over time. As Rea puts it: “This understanding of scientific method

What are inductivism and hypothetico-deductivism? Inductivism and hypothetico-deductivism are two alternative views on the working of science and the scientific method.<sup>53</sup> Ritchie's offers the following description of inductivism:

Inductivists say that science begins by piecing together observations. From the data we put forward a tentative generalization. We then look for analogous phenomena in the world on the bases of which we can extend our generalizations. Once we have a generalization, we use it to make predictions. If the prediction matches the new data, the theory is confirmed. The more tests our theory passes, the more our theory is to be trusted and the more chance there is that it is true.<sup>54</sup>

The key to understanding inductivism is that it starts from observations based upon which generalizations are made. These generalizations are then in turn used to base predictions upon. Then, if new observations match the predictions, the theory – made up of generalizations – is confirmed. Hypothetico-deductivism differs from this, especially where it concerns the development of the tentative theory. Ritchie gives the following description of hypothetico-deductivism:

Hypothetico-deductivists, on the other hand, claim that science does not begin with raw data but by postulating a theory or hypothesis to explain some phenomena that we are interested in. From that we make predictions. If the tests agree with the predictions, we hang on to our theory. If the prediction doesn't match up with the data, then we must discard our old hypothesis and replace it with a new one.<sup>55</sup>

While inductivism develops from observations to generalizations to theory, hypothetico-deductivism starts out by postulating a theory aimed at explaining a particular phenomenon. Then predictions are made based on the theory and if new observations match the predictions the theory is confirmed. The

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is sufficiently conservative to rule out the various methods most naturalists want to rule out (e.g. the methods of astrology, phrenology, or iridology). But it is liberal enough to allow that the range of scientific methods might change over time.' Rea 2002: 67. Despite the possibility of change, the naturalist's core commitment to a scientific method will not change: 'The heart of the shared research program – the disposition to treat as basic sources of evidence whatever methods counts as scientific – will remain unchanged.' Rea 2002: 67. Whether it's a threat to the naturalist that the scientific method changes over time can be debated, but I will not be able to address this issue any further here.

<sup>53</sup> There are other alternatives too, such as Kuhn's 'paradigm' view of the scientific method, but I will not go into this here.

<sup>54</sup> Ritchie 2009: 74.

<sup>55</sup> Ibid.

second part of the method – experimentation or testing – is thus similar in both accounts, but the position of theory is different. Even though there are differences between inductivism and hypothetico-deductivism, there is general common ground:

Although inductivists and hypothetico-deductivists disagree over the fundamental methods of science, the pictures have in common two elements: first, scientists produce theories of the world; and secondly, the scientific method involves (in some way) the testing of those theories.<sup>56</sup>

So, according to both models, scientists come up with theories and test them using the scientific method. This means that there are (at least) two components to the development of a scientific theory: (i) theorizing and (ii) experimentation. We have seen in the description above what these processes involve: theorizing is what is done either right at the start and predictions are formed based on this theory, or observations are taken together and generalized so as to put forth a theory. Experimentation, or testing, is the second phase of developing a scientific theory for hypothetico-deductivists, but the first phase for inductivists. In this phase the tentative theory is tested: it is checked whether new observations match the existing predictions made based on the tentative theory. If they do, the experimentation confirms the theory; if they don't, then the theory needs to either be adjusted or rejected.<sup>57</sup>

Before we can answer the question in the next chapter whether the subjectivity of experience is compatible with methodological naturalism, we need to know what the ontological consequences are of science and the scientific method. Which things exist according to science?

According to methodological naturalism, those entities exist that our best scientific theories quantify over. After all, according to methodological naturalism science tells us which things exist. This means that our scientific theory will tell us what exists in the sense that anything that appears in a scientific theory, i.e. anything that is quantified over in a scientific theory, exists. And nothing which does not appear, i.e. is not quantified over, does exist. That is: anything that is not in a scientific theory does not exist. We can find the idea that those things exist which are quantified over in scientific theories in Quine:

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<sup>56</sup> Ibid.: 76.

<sup>57</sup> It should be noted that it is possible that two different theories both fit all the available scientific evidence and as such are as good candidates to explain a certain phenomenon. In this case the phenomenon is overdetermined. This is a problem for scientists, but not for us.



To show that some given object is required in a theory, what we have to show is no more nor less than that that object is required, for the truth of the theory, to be among the values over which the bound variables range.<sup>58</sup>

It should be pointed out that the claim that ‘science tells us what exists’ is different from the claim that ‘science tells us what is true’. There are two problems with the statement that ‘science tells us what is true’. First, surely science gives us only truths, but it is very likely that there are disciplines other than science that give us some truths, such as e.g. world history. All the foregoing says is that such truths, as the ones contained in the discipline studying world history, don’t quantify over anything *in addition* to the kinds of things that science quantifies over. Second, the claim that ‘science tells us what is true’ is self-refuting because, for this to be a coherent position, it is not only necessary that science tells us what is true, but in addition this statement itself (i.e. the statement that ‘science tells us which things exist or, in other words, what is true’) should be true. However, this statement could never be the result of science. The fact that this statement (i.e. ‘science tells us which things exist or, in other words, what is true’) is itself not a claim that is or can be the result of science is sometimes thought to indicate that naturalism is self-refuting and incoherent.

Another way of saying that those entities exist that our best scientific theories quantify over is to say that those entities exist that are indispensable for science. The entities that are indispensable for science are quantified over in scientific theories. Ritchie mentions that Quine holds this to be true:

Quine believes in the existence of mathematical objects such as numbers and sets. His reason for so believing is that numbers and sets play an indispensable role in our best scientific theories and we as good naturalists should be committed to whatever entities our best science finds indispensable.<sup>59</sup>

This approach for determining which things exist is standard in contemporary analytic metaphysics. In *Understanding Naturalism*, Ritchie calls this approach ‘constructive methodological naturalism’, which is, of course, what we have been calling ‘methodological naturalism’:

I shall call this approach to ontological questions ‘constructive methodological naturalism’. It is the way most ontological questions are pursued in contemporary philosophy. The naturalized ontologist must put forward arguments for the indispensability and

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<sup>58</sup> Quine 1969: 94.

<sup>59</sup> Ritchie 2009: 99.

the explanatory worth of the entities he takes to exist. His opponents must dispute the indispensability or explanatory worth of those entities. That's how we are supposed to decide what there is.<sup>60</sup>

As we have just seen, Quine believes we need mathematical entities to exist because they are indispensable for science. Other philosophers have argued for the existence of different entities in a similar fashion. For example, Armstrong thinks that universals are indispensable for science and therefore should be said to exist for methodological naturalists:

In a similar vein, David Armstrong has claimed that we should be committed to the existence of universals. According to Armstrong, we need universals to make sense of certain aspects of our science.<sup>61</sup>

And Lewis has argued that possible worlds are necessary for science and therefore should be said to exist:

David Lewis (...) claims that our ordinary and indeed our scientific talk commits us to the existence of what he calls possible worlds.<sup>62</sup>

Now, according to methodological naturalism, entities that possibly exist include: mathematical objects, universals and possible worlds, in addition to quarks, electrons, waves and/or other fundamental particles (if, of course, there are such things). Instead of trying to list anything that possibly exists according to science, a more interesting question is if there are any principled restrictions on what can be in our scientific theories, i.e. as to what our scientific theories can be about. Given the nature of the scientific method, there are indeed principled limitations to which entities scientific statements (used in our scientific theories) can quantify over. What is it about the scientific method that limits which entities scientific theories can quantify over? Let's explore this aspect of science and the scientific method.

Science and the scientific method have always been described as essentially 'public', 'objective' or 'intersubjective'. In the following, I will refer to this aspect of science and the scientific method as 'objectivity' or I will speak of science and the scientific method being objective – but I consider this the same aspect as its 'publicity' or 'intersubjectivity'. As just said, this is an essential aspect of science and the scientific method. In order to be able

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<sup>60</sup> Ibid.: 101.

<sup>61</sup> Ibid.: 100.

<sup>62</sup> Ibid.: 99.

to answer our question whether the subjectivity of experience is compatible with methodological naturalism, we'll need to know more about this aspect of science and the scientific method. I will now turn to the literature in which science and the scientific method are characterized as objective in order to find what this means exactly.

In his paper "Science, Publicity and Consciousness" Goldman writes extensively about this aspect of the scientific method:

An old but enduring idea is that science is a fundamentally 'public' or 'intersubjective' enterprise. According to this thesis, the core of the scientific methodology is interpersonal rather than private.<sup>63</sup>

Goldman uses the term 'agreement' to spell out what it means for science to be public or objective. He formulates the 'publicity restraint' as follows.<sup>64</sup>

(O1) Objectivity of science means that: Statement S qualifies as a piece of scientific evidence only if S is a statement on which scientific observers could reach agreement.<sup>65</sup>

Goldman makes clear that this aspect of science has been important since the beginning of modern science:

Even at the advent of modern science, publicity received a prominent role. Boyle insisted that the witnessing of experiments was to be a collective act.<sup>66</sup>

It was also important in the time of logical positivism:

The publicity thesis was prominent in the positivist era, and although it is less frequently discussed today, I suspect it would still receive a vote of approval, or a nod of assent, from most philosophers of science.<sup>67</sup>

In his discussion of the 'publicity requirement' as he calls it, Goldman discusses three important figures in the philosophy of science who have also described this essential aspect of science and the scientific method. The first Goldman mentions is Popper. Popper writes the following about science:

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<sup>63</sup> Goldman 1997: 525.

<sup>64</sup> It should be noted that Goldman calls this '(P4)' but I will call it '(O1)', since I am formulating these definitions in terms of objectivity rather than publicity.

<sup>65</sup> Goldman 1997: 527.

<sup>66</sup> Ibid.: 526.

<sup>67</sup> Ibid.

Popper held that 'the objectivity of scientific statements lies in the fact that they can be intersubjectively tested'. Epistemically, 'basic' statements in science, said Popper, are statements 'about whose acceptance or rejection the various investigators are likely to reach agreement.'<sup>68</sup>

Popper's definition of the objectivity of science can be formulated in two different ways, which (most likely) come down to the same idea:

- (O<sub>2</sub>) Objectivity of science means that: Scientific statements can be intersubjectively tested.

And:

- (O<sub>3</sub>) Objectivity of science means that: Investigators are likely to reach agreement about acceptance or rejection of scientific statements.

The second important philosopher who has written about this aspect of science and the scientific method, who is also mentioned by Goldman, is Hempel. This is what Goldman writes about Hempel:

Hempel followed Popper in requiring that all statements of empirical science be capable of test by reference to evidence which is public, i.e. which can be secured by different observers and does not depend essentially on the observer.<sup>69</sup>

The definition that we can extract from this passage is the following:

- (O<sub>4</sub>) Objectivity of science means that: All statements of empirical science should be capable of test by reference to evidence which can be secured by different observers and does not depend essentially on the observer.

This definition is very similar to (O<sub>2</sub>) but adds to it that the evidence cannot essentially depend on the observer.

The third important figure that Goldman discusses is Feigl. Feigl describes 'objectivity' in science very extensively. Here is a passage in which he does so:

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<sup>68</sup> Ibid.

<sup>69</sup> Ibid.

The quest for scientific knowledge is (...) regulated by certain standards or criteria (...). The most important of these regulative ideas are:

Intersubjective Testability. This is only a more adequate formulation of what is generally meant by the “objectivity” of science. What is here involved is (...) the requirement that the knowledge claims of science be in principle capable of test (...) on the part of any person properly equipped with intelligence and the technical devices of observation or experimentation. The term intersubjective stresses the social nature of the scientific enterprise. If there be any “truths” that are accessible only to privileged individuals, such as mystics or visionaries – that is, knowledge-claims which by their very nature cannot independently be checked by anyone else – then such “truths” are not of the kind that we seek in the sciences. The criterion of intersubjective testability thus delimits the scientific from the non-scientific activities of man.<sup>70</sup>

The definition of objectivity that we can infer from this passage is the following:

(O5) Objectivity of science means that: Knowledge claims of science should in principle be capable of test.

So far for the figures that Goldman mentions. There are many others, though, who stress how very crucial this aspect of science is. We can, for example, also find the idea that intersubjectivity is essential to science in Railton:

Objective inquiry uses procedures that are intersubjective and independent of particular individuals or circumstances – for example, (...) it makes no essential use of introspective or subjectively privileged evidence in theory assessment.<sup>71</sup>

The definition of the objectivity of science that can be inferred from this passage is the following:

(O6) Objectivity of science means that: The procedures used in science are independent of particular individuals or circumstances.

Another description of the objectivity of science can be found in Gillies. Here is the relevant passage:

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<sup>70</sup> Ibid.

<sup>71</sup> Ibid.

One point to notice here is the claim that statements about physical objects are intersubjective. This is really the crux of the matter. The line of thought is this. Let us first consider the protocol sentences of a science like physics or chemistry. Such sciences are carried on by a community of scientific workers. Now a particular observation of experiment may be carried out by scientist A. However if the result is to be accepted by the community, it is important that A's result should be capable of being checked by another scientist, B. If A's protocol is about physical objects, it can in principle be checked by B, and so is inter-subjective. If, however, A's protocol is about A's private sensations, then A's protocol cannot be checked by B.<sup>72</sup>

The definition of the objectivity of science that can be inferred from this passage is the following:

- (O7) Objectivity of science means that: Scientific results should be capable of being checked by other scientists.

We can also find the idea that science is objective in Fetzer:

The objectivity to which science aspires is defined by intersubjective standards of reasoning. In principle, different scientists confronted by the same alternative hypotheses and the same relevant evidence would tend to accept and reject all and only the same tentative conclusions by virtue of relying upon the same principles of reasoning.<sup>73</sup>

From this passage it can be inferred that part of the objectivity of science lies in the scientists' use of 'intersubjective standards of reasoning' or logic. Since this description contains the word 'intersubjective' we should better use the second part of the description:

- (O8) Objectivity of science means that: Different scientists confronted by the same alternative hypotheses and the same relevant evidence would tend to accept and reject all and only the same tentative conclusions by virtue of relying upon the same principles of reasoning.

These eight definitions of the objectivity of science can be regarded as variations of one and the same definition. Some definitions of the objectivity of science are put in terms of scientists reaching agreement about scientific statements, the other definitions of the objectivity of science are put in terms

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<sup>72</sup> Gillies 1993: 120-121.

<sup>73</sup> Fetzer 1993: 6.

of scientific statements (or results or knowledge claims) being capable of test by other scientists. It should be clear that both these definitions come down to the same thing:

- (a) Scientists can, could and/or in fact do reach agreement about scientific statements.
- (b) Scientific statements (or scientific results, knowledge claims) are capable of test by other scientists.

It is easy to see that (a) and (b) are not two alternative definitions of the objectivity of science, but are two different ways of describing the same phenomenon. Thesis (a) is formulated in terms of ‘scientists’ who can reach agreement about which scientific statements to adopt and which to reject, whereas thesis (b) is formulated in terms of ‘scientific statements’ that can be tested by any scientist. As a result of these tests, scientific statements will either be adopted or be rejected. As thesis (a) indicates, scientists will agree which statements to adopt or reject – based on the fact that they get the same results when they test the same statements. Thesis (a) and (b) are thus so closely related that it would be foolish to distinguish two senses in which science is objective. The definition of the objectivity of science that I will use is therefore a combination of (a) and (b);

- (O9) The objectivity of science means that: Scientific statements can be confirmed by any scientist by experiment and/or the relevant computations.

The definition of the objectivity of science that we have found, (O9), is very similar to the demarcation criterion that Popper uses to distinguish science from pseudo-science. As we have seen, the objectivity of science, according to Popper, consists in the following: ‘the objectivity of scientific statements lies in the fact that they can be intersubjectively tested’<sup>74</sup>. Gorham writes: ‘Popper’s demarcation criterion offers a clear and simple condition of the scientific status of a theory: there must exist empirical tests that could decisively refute it.’<sup>75</sup> Now, Popper’s demarcation criterion has received a fair amount of criticism. Because our definition of the objectivity of science is so similar to Popper’s demarcation criterion for science, the points of critique that apply to his demarcation criterion apply to our definition of the objectivity of science

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<sup>74</sup> Popper 1992: 22.

<sup>75</sup> Gorham 2009: 34–5.

just as well. For this reason I will discuss the main objection against Popper's view. Which are the objections against his view?

The biggest objection seems to be that science possibly does not work the way Popper describes. As Gorham writes:

Historians of science have been quick to point out that science simply does not work the way Popper envisions. Most importantly, otherwise valuable theories are not rejected simply because they have some false content.<sup>76</sup>

Gorham explains that even though anomalies have been observed, the big bang theory has not simply been abandoned by scientists for this reason. The reason why actual scientists do not follow Popper's 'strict falsificationism'<sup>77</sup> is twofold according to Gorham: (i) 'alternative theories with comparable explanatory power are not easy to come by'<sup>78</sup> and (ii) 'sticking with an existing theory despite its flaws even when this requires ad hoc repairs in the short run, can sometimes prove an excellent strategy over the long haul.'<sup>79</sup> Now, it may be the case that science *de facto* does not function as Popper describes, i.e. as it ought to function. However, that does not mean that his theory is false, but rather that he is describing ideal science instead of actual science. Moreover, it seems that the two reasons mentioned to prefer actual science over ideal science are not very good either. It might be the case that Popper is committed to abandon a theory before finding an alternative theory with the same explanatory power and it might be the case that Popper is committed to abandoning a theory as soon as it is flawed. But we are not so committed simply given our definition of the objectivity of science. How can we respond to objections (i) and (ii)?

Regarding (i) it should be noted that, given our definition of the objectivity of science, it merely should be possible to falsify a theory and replace it with a better one if the latter theory matches the observations better than the old one. I don't claim that we should abandon a theory right away if there is not a better one with which to replace it. Regarding (ii) a similar point can be made: naturally, the theory that best matches the data should be preferred and an old theory should be abandoned only if there is a better one with which to replace it. If there is not a better theory with which to replace the old theory, then I would agree to stick with the old theory. If there is a better theory with which

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<sup>76</sup> Ibid.: 37.

<sup>77</sup> As Gorham calls it.

<sup>78</sup> Gorham 2009: 38.

<sup>79</sup> Ibid.



to replace the old theory, then it seems false that it would be better to stick with the old theory (since the 'better' theory is per definition better).

The main gist of Popper's demarcation criterion for science seems tenable and our definition of the objectivity of science certainly seems to be. Gorham also thinks that Popper's main idea is right:

If a theory is absolutely immune to empirical challenge then it cannot be a serious contender in the scientific enterprise. And this I take to be the core insight of Popper. But although we will expect a science to involve empirically testable, mathematically precise, logically coherent explanations of natural systems, different sciences will exemplify these virtues in varying degrees.<sup>80</sup>

The fact that our definition of the objectivity of science is so similar to Popper's demarcation criterion for science is thus not a problem, despite the fact that Popper's demarcation criterion has been criticized.

We said before that what is involved in science is (i) theorizing and (ii) experimentation. Now how are both these aspects of science objective, according to definition (O9)? Theorizing is objective in the sense that sentences used in a scientific theory need to be such that they can be checked by other scientists. This requires that the sentences used in scientific theories do not depend in any way on the scientist as a person, only on the results of his or her research.

The second part of science, experimentation or scientific experiments, is objective in the sense that any experiments can be done by more than one person, i.e. there should be nothing unique about the scientists who do them, and these scientists would presumably come to the same conclusions. This means that anyone who has access to the data of scientific research, who has the required skills and knowledge (e.g. of logic and math), and who has the relevant textbooks, can do the science and arrive at the same conclusions. That means that any scientist can, and would, formulate the same theory based on the same research data and it also means that any scientist could verify the truth of the sentences used in a theory of a different scientist.

But can really anyone using reason, math and logic verify claims made in scientific theories? It seems that this person, or this scientist, does need to meet a number of criteria, some of which were mentioned before, such as having access to research data, possessing knowledge of math and logic, possessing the required textbook knowledge and so on. Quine has said this also:

The scientific community is no private club. In principle, and in the best and broadest sense of the words, scientific inquiry can be undertaken by anyone on almost

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<sup>80</sup> Ibid.: 40.

any subject matter. Practically speaking, such inquiry often demands a vast fund of background knowledge and a sizable team of cooperating inquirers, not to mention sophisticated equipment; this is because human knowledge has already progressed so far. But at root what is needed for scientific inquiry is just receptivity to data, skill in reasoning, and yearning for truth. Admittedly, ingenuity can help too.<sup>81</sup>

There are a number of obvious objections against the idea that anyone could arrive at the same scientific conclusions and verify scientific theories. First, what about the past and future? It seems that there are truths about the past and future that science cannot establish. Second, the magnitude of the task would prevent any person from establishing truths about, e.g. the number of blades of grass on the earth. Third, there is problem with particularity: a scientist does not know how many books I have in my office, but there is a fact to the matter and so there is a true proposition about the number of books in my office. Fourth, location is an issue: location issues would prevent any person from establishing truths about, e.g. the number of stars in the universe.

These objections can all be countered by adding the following clause. Any person using the methods of science could tell us what is true, given that there are no restrictions on: location, time, equipment, resources, number of scientists, and assuming scientists are 'proper functioning'. From now on, I will call a scientist who meets all these criteria the, or an, 'ideal scientist'.

With these qualifications in place, scientists could tell us all and only what is true – but could they? Does the fact that the scientific method is objective limit which entities scientific theories can be about?

As we have seen, entities that are unproblematic for the methodological naturalist include mathematical objects, possibly universals and possibly possible worlds. There may be other entities, possibly many more, over which scientific theories can quantify without any problem. But what about the entities we are most interested in: subjective experiences? Can they exist according to the methodological naturalist?

Well if experience is subjective, then sentences which quantify over experiences are not publicly verifiable. This point was made in one of the passages we've seen above about scientist A and scientist B, to repeat:

If A's protocol is about physical objects, it can in principle be checked by B, and so is inter-subjective. If, however, A's protocol is about A's private sensations, then A's protocol cannot be checked by B.<sup>82</sup>

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<sup>81</sup> Quine 1978: 3-4.

<sup>82</sup> Gillies 1993: 121.

This means that there cannot be a scientific theory about experiences. After all, statements (or 'protocol') about experiences cannot be verified by the ideal scientist, because the experiences that these statements are about are not intersubjectively available. As we have seen, statements that cannot be verified by the ideal scientist cannot be part of a scientific theory. Since the only things that exist are things that our scientific theories can quantify over (as we have seen in Quine), experiences cannot exist according to the methodological naturalist. Methodological naturalism is thus a limited view: it excludes the existence of experiences because they are subjective in the senses we specified in the first chapter.

It might seem that the existence of universals, sets and numbers is a counterexample against this definition of the objectivity of science. If there cannot be scientific theories about experiences because experiences are subjective and thus cannot be quantified over in scientific sentences which means that these scientific sentences could then not be confirmed by other scientists, then what about these other immaterial entities? Even though this might initially seem like a good counterexample, in fact, it is not. Experiences might be immaterial, just as universals, sets and numbers, but the difference is that universals, sets and numbers are entities that we are all acquainted with – if we know the concepts that refer to them. Everyone who knows the relevant concepts is acquainted with the number 2 and with 'redness'. These objects might be immaterial, but they are not subjective in the sense that experiences are. Universals, sets and numbers are intersubjectively available. Experiences, though they are possibly also immaterial, are not intersubjectively available, as we have seen in the first chapter.

In the next chapter, I will discuss in much more detail whether the subjectivity of experience is compatible with methodological naturalism or not. As I just briefly pointed out, there seems to be an incompatibility here: if science tells us which things exist, according to methodological naturalism, and there cannot be any scientific theories about experiences because they are subjective, then subjective experiences cannot be said to exist for the methodological naturalist. Methodological naturalism is thus limited in this way. Moreover, if it is true that experiences do exist, as we argued in the second chapter, and if it is true that they are subjective, as we argued in the first chapter, then methodological naturalism is false. This goes very fast, but in the next chapter I will closely look at each definition of the subjectivity of experience individually and determine whether that sense of the subjectivity of experience is incompatible with methodological naturalism.

#### 4.7 CONCLUSION

In this chapter, we have discussed methodological naturalism. First, we discussed the definitions of methodological naturalism that we found in the previous chapter. We decided that, even though they can be divided into two groups, ideal-physics naturalism and scientific naturalism, ideal-physics naturalism can easily be subsumed under scientific naturalism. Second, we considered whether a distinction should be made between naturalism as a thesis or a view on the one hand and naturalism as a stance or a research program on the other hand. Similar to our conclusion for the case of epistemological naturalism, we decided that the reference to the scientific method is crucial and the specific epistemic attitude one takes toward it, be it an inclination to accept, disposition to accept, or commitment to, is (even though there is a significant difference there) of secondary importance.

We then moved on to the question whether the kind of methodological naturalism that we formulated is in fact a tenable and credible position. In the previous chapter, we established that there is no kind of metaphysical naturalism that is tenable, so this is an important question to ask. In order to answer this question, we discussed a number of problems that rise as soon as one tries to formulate the position of methodological naturalism. We focused on methodological naturalism's biggest threat: Hempel's dilemma. We concluded that, even though this is a serious issue, there is a way to sidestep it so that we can still work with the formulation of naturalism as we found it. We continued to discuss two lesser problems for methodological naturalism that also arise as soon as one tries to formulate this position but concluded that methodological naturalism is still a tenable position.

Now that we established that methodological naturalism is a tenable position, we asked what its ontological consequences are. After all, in the next chapter we want to consider whether methodological naturalism is compatible with subjectivity. This is why the next part of this chapter was devoted to the relationship between metaphysical naturalism and methodological naturalism. First we asked the question whether methodological naturalism implies metaphysical naturalism (physicalism or materialism). We then focused on the specific ontological implications methodological naturalism has. This led us to a discussion of science and the scientific method and of a crucial aspect of science, namely publicity, objectivity or intersubjectivity. We discussed this aspect of science and the ontological implications it has. We concluded that,

according to methodological naturalism, the only (kinds of) things that exist are public or intersubjectively available.

The formulation of naturalism that we found in this chapter is the one that we will work with in the next chapter, Chapter 5. There, we will consider whether the phenomenon of subjectivity, as we have found it in Chapter 1, is compatible with methodological naturalism.

## Are Subjectivity and Naturalism Compatible?

The aim of this chapter is to establish whether the subjectivity of experience is compatible with naturalism, and, if it is incompatible, to explain just why and how it is. We are in a good position to answer these questions. In the first chapter, we found several definitions of subjective-making properties that experience has if there is such a thing as experience. In the second chapter, we argued that in fact there is such a thing as experience or, to be more precise, that there are token as well as type experiences. Then, in the third chapter, we argued that a distinction can be made between metaphysical naturalism on the one hand and methodological naturalism on the other hand. We continued to argue that all versions of metaphysical naturalism can be refuted, so if naturalism is to be a tenable position at all, it should be methodological naturalism. In the fourth chapter, we then focused on methodological naturalism and concluded that despite problems of its own, it is in fact a tenable position. Finally, we addressed the question which ontological consequences methodological naturalism has and found that it at least seems to be that case that there is an initial incompatibility between methodological naturalism and the subjectivity of experience. In this chapter, I will discuss each of the five senses in which we found experience to be subjective, which we discussed in the first chapter, and for each of these I will analyze whether it is compatible with the theory of naturalism.

Since we found five definitions of subjectivity, I will be discussing five possible cases of (in)compatibility in five subsequent sections. In the first section of this chapter, section 5.1, I will discuss the (in)compatibility of definition (S1) with methodological naturalism.

In section 5.2, I will discuss the (in)compatibility of definition (S2), which

we found in Nagel's work, and methodological naturalism, which will lead to a discussion of the 'argument from perspective', section 5.2.1, the knowledge argument, section 5.2.2, and Nagel's own argument against physicalism, section 5.2.3. This section is not just about Nagel's work, but also concerns the idea that experiences are 'perspectival', which we have found in the work of e.g. Farkas and Searle.

Then, in section 5.3, the (in)compatibility between (S<sub>3</sub>) and methodological naturalism will be discussed, focusing on what I call 'the argument from privacy'. Next, section 5.4 will be about the (in)compatibility of (S<sub>4</sub>) with methodological naturalism, which will lead to a brief discussion about the kind of knowledge we have of our experiences. Then, in section 5.5, I will discuss the last subjective-making property that we found, (S<sub>5</sub>), which raises the most straightforward and obvious (potential) dualist argument against methodological naturalism, viz. that there are immaterial persons.

As I will show in this chapter, at least three definitions of subjectivity are incompatible with naturalism. That means that, if the arguments are sound and the accounts of subjectivity and of naturalism are correct, then the subjectivity of experience is incompatible with naturalism.

Before concluding the chapter, I will consider a number of objections against the arguments for the claim that naturalism and the subjectivity of experience are incompatible. I will first consider the objections from Lycan, who has argued that even though subjectivity is a genuine phenomenon, there is no noteworthy incompatibility between this phenomenon and naturalism and subjectivity does not pose a threat to naturalism in any way. I will analyze Lycan's arguments and offer replies to them. I will go on to consider a second kind of objection, viz., that despite appearances, experiences are intersubjectively available and therefore not problematic for methodological naturalism. This objection stems from the identity theory of mind, which I will discuss in section 5.6.2.

Section 5.7 concerns a topic along the same lines as section 5.6: here I will discuss alternative approaches to the claims of incompatibility that are made in the previous sections of this chapter. These are not extreme alternative approaches such as denying the existence of subjective experience or adopting dualism but alternative approaches that the methodological naturalist could possibly adopt. I will discuss Chrisley's alternative interpretation of the concept of 'objectivity' as 'intersubjectivity', Velmans' similar endeavor, and the theory of 'subjective physicalism' by Howell.

Finally, in section 5.8, I will summarize this chapter and draw conclusions.

## 5.1 (S1): PHENOMENAL CHARACTER OF EXPERIENCE

In this section, I will look at the following definition of the subjectivity of experience and discuss whether this definition is a problem for methodological naturalism:

- (S1) E is subjective=df. For all subjects S, if S has E, then there is something it is like for S to have E.

As we established before, to say that there is something it is like for someone to have an experience is just to say that experience has phenomenal character. Is it compatible with methodological naturalism to hold that there is something it is like to have experiences or, in other words, that experience has phenomenal character? In the previous chapter we found that methodological naturalism is the theory that science tells us which things exist. We also found that scientific statements need to be objective, meaning that they should be capable of tests performed by other scientists. Every scientific statement thus needs to be such that anyone (any other scientist) could verify it. This, in turn, means that scientific statements can only quantify over objects that are intersubjectively available. For if they quantify over objects that are not intersubjectively available, then these 'scientific' statements could not be verified by any other scientist and would therefore cease to be scientific. If there cannot be a scientific theory about something, then, since science provides us with the truth and the whole truth, this 'thing' does not exist. Therefore, for anything to exist, according to methodological naturalism, it should be intersubjectively available – meaning that it is observable and/or verifiable by any person satisfying the criteria described in Chapter 4, i.e. by the ideal scientist.

The question we want to answer in this section is whether or not the fact that experience has phenomenal character, or qualia, is compatible with methodological naturalism or not. This obviously depends on the fact whether phenomenal character is intersubjectively available. Since (S1) doesn't make any claims about whether or not phenomenal character is intersubjectively available, (S1), taken at face value, is not obviously incompatible with naturalism; however, it could be. Under which conditions would (S1) be incompatible with naturalism? (S1) would be incompatible with naturalism if phenomenal character would not be intersubjectively available. For example, if phenomenal character is essentially connected to a single point of view, (S2), which can be interpreted such that only those people who have had an experience with certain phenomenal character can know what it is like to have



that experience (S2'), then phenomenal character would not be intersubjectively available. That means that if (S2') is true, then phenomenal character would not be intersubjectively available and (S1) would be incompatible with methodological naturalism, in virtue of having the further subjective-making property (S2) or (S2'). Thus, whether or not (S1) is incompatible with naturalism depends on whether (S2') is true and on whether (S2) is incompatible with naturalism (which it seems to be). I can see no other way in which (S1) would be incompatible with naturalism except for the reason that the further property (S2) would make it so incompatible. There is thus no further need to discuss (S1), so I will move on by discussing (S2) in the next section.

## 5.2 (S2): A SINGLE POINT OF VIEW

In this section, I will discuss whether or not the following way in which experience is subjective is compatible with methodological naturalism:

(S2) E is subjective =df. E is essentially connected to a single point of view.

As we will soon find out, (S2) is, in fact, incompatible with methodological naturalism. This means that an argument against methodological naturalism can be formulated based on this incompatibility. In section 5.2.1, I will explain why (S2) and methodological naturalism are incompatible and I will formulate an argument against methodological naturalism based on this. In the remainder of this section, two important questions need to be addressed. First, is this argument the same argument as the knowledge argument or is it different? I will address this question in section 5.2.2. Second, is this argument the same as Nagel's argument or not? I will address this question in 5.2.3.

### 5.2.1 Argument from Perspective

The question we want to answer in this section is whether the subjectivity of experience, as defined by (S2), is incompatible with methodological naturalism or not. We have a good grasp now of (S2) and its implications. To recall, methodological naturalism entails that for anything to exist it has to be intersubjectively available. Are subjectivity, as defined by (S2), and methodological naturalism, as defined in Chapter 4, compatible?

If one interprets 'being essentially connected to a single point of view' (S2) in the sense of (PV6), i.e. 'one can only know what it is like to have

an experience with phenomenal character if one has had an experience with sufficiently similar phenomenal character', i.e. as (S2'), then experience and phenomenal character are not intersubjectively available. After all, in that case one can only know what it is like to have an experience with particular phenomenal character if one has had the experience. Someone who has not had a particular experience with its particular phenomenal character cannot know what it is like to have that experience. Knowledge of what it is like to have experiences is thus only available to some, not to all. That means that experiences and phenomenal character are not intersubjectively available according to (S2'). And this, in turn, means that (S2') is incompatible with naturalism.

Since there is an incompatibility between (S2') and methodological naturalism, we can formulate an argument against naturalism. Here is the argument, based on the incompatibility described in the previous paragraph, in a more formal way:

#### Argument from Perspective

1. If methodological naturalism is true, then every true statement is verifiable by an ideal scientist. [Chapter 4]
2. Possibly, there is an ideal scientist who does not know what it is like to have some PV-experience.
3. If an ideal scientist cannot know what it is like to have some PV-experience, then there is at least one true statement that an ideal scientist cannot verify.
4. Therefore, methodological naturalism is false. [1, 2, 3]

Let's go over this argument a little more slowly. We argued for the first premise in the previous chapter and established that indeed, if methodological naturalism is true, then any statement should be verifiable by an ideal scientist. We have not discussed the second premise yet, but it seems pretty straightforward that it is true. After all, it seems possible that there is a person who satisfies all the criteria specified in Chapter 4, i.e. an ideal scientist, but who does and/or could not know what it is like to have a particular experience. Which things does the ideal scientist not know? Are there any things that the ideal scientist *could* not know?

As for the first possibility, it seems that there is not anyone, including an ideal scientist, who has had every single experience one could possibly have. In fact, it seems impossible for there to be such a person in ordinary life. But since our scientist is not restricted in time and location and since there is no

limit either on the size of his team of other ideal scientists, it seems that it is not impossible for him to have every single possible experience, though it does seem very unlikely. Since there are so many possible experiences we can still easily imagine a team of ideal scientists who have not had a particular experience, such as, for example, the experience of ‘buttering toast in the White House’. Of course, they could have that experience, but it is possible (even likely) that *de facto* they have not had it and therefore do not know what it is like to have it. So, it is possible that the ideal scientist does not know what it is like to have some PV-experience. But are there PV-experiences which the ideal scientist could not have?

Obviously, there are not so many cases of experiences that the ideal scientist *could* not have, compared to the experiences that the ideal scientist *has* not had. But are there any cases of experiences at all that the ideal scientist could not have? The examples are not so plenty here, but there are a few. In what follows, I will describe three categories of PV-experiences that the ideal scientist cannot have. The first category of experiences contains experiences of a different species. For example, the ideal scientist could not know what it is like for a bat to hang upside down in the attic, or what it is like for a bee to make honey. So, the ideal scientist could not know what experiences of other species are like and he could never have those experiences.

The second category of experiences of which the ideal scientist could not know what they’re like are experiences of infants. Granted, the ideal scientist was once an infant, but is not an infant anymore and – presumably – does not remember much from being an infant a long time ago. This means that the ideal scientist cannot know what it is like for an infant to be, for example, separated from the mother.

The third category of experiences which might be problematic for the ideal scientist is that of, let’s call it, ‘acquired taste’. A wine connoisseur has a much more refined palate than the average wine-drinker and we can expect the connoisseur and the average drinker to have a very different experience of tasting wine. We can assume that the average wine-drinker has, in turn, a different experience of tasting wine than the beginning wine-drinker who would, for example, not recognize the kind of wine by its taste and who certainly does not have the phenomenal concepts that the connoisseur applies to it. Where the connoisseur might distinguish the smell of subtle spice aromas and a hint of butter, the average wine-drinker may only recognize it is a Chardonnay and the new wine-drinker might just think ‘so *this* is what wine tastes like’. Now, the issue is that our ideal scientist, when tasting wine, needs to be positioned somewhere on the scale between the connoisseur, the average wine-drinker and the beginner. But this means that whatever position she takes, she

necessarily does not take any of the other positions and could not possibly take them. After all, the wine connoisseur cannot remember or imagine anymore what it was (or would be) like to have wine for the first time: she cannot help but picking up on the subtle spice aromas and the taste of butter. You cannot turn acquired taste 'off'. This is not just a problem for wine-tasting, but for all our senses there is a degree to which we can be more or less of a 'connoisseur'. Some people have a much more developed olfactory capacity than others, others have a gift for hearing and can play music after just having heard it once, and it is often said that blind people hear much better than people who can see. Everyone, for all senses, is positioned on a scale between connoisseur and beginner, including the ideal scientist. This means many experiences are excluded from the ideal scientist per definition and she can never know, for example, what it is like to have a very good nose, or to be tone-deaf, or to hear even the faintest sound.

The fourth category of experiences is the one of past contingencies. Let me explain. Jill, who fell from the swing set as a child, might a while later (or forever) have a different experience of going on a swing set than Jack, who has only ever had fun going on the swing set. Whereas this is fun for Jack, for Jill there is something scary about it that never quite goes away. Or take the following example. You have a curry dish containing a lot of cumin and coincidentally that night you get a fever and fall very sick. In the future, the smell of cumin might make you feel sick because of its association with the fever you developed the night you had cumin before. For someone else, cumin might smell wonderful, and for yet someone else it might remind them of a place where they once traveled, or a restaurant they visited. The issue is that our ideal scientist will have her own associations with experiences based on the contingencies of her past. This also means that there are plenty of associations and past experiences that she does not have and cannot have or know.

We can conclude that there are at least some experiences that even an ideal scientist could not have and of which they could not know what these experiences are like. This means that the second premise of the argument is also true. The third premise simply states that if it is the case that an ideal scientist cannot know what it is like to have some PV-experience, then there is at least one true statement that an ideal scientist cannot verify. This premise clearly seems true, after all, the ideal scientist could not verify statements about experiences which she has not had and cannot have. This means that the argument from perspective against methodological naturalism is sound.

There are two questions I want to address in the remainder of this section: Is this argument the same argument as the knowledge argument? And is this argument the same as Nagel's argument?

### 5.2.2 The Knowledge Argument

An important question that needs to be addressed is whether the argument against naturalism based on (S2), which we discussed in the previous section, is the same argument as the knowledge argument. I will discuss this matter in the present section.

The knowledge argument has been a topic of great dispute as the main focus of the qualia debate. Jackson famously introduced it in the form of his thought experiment about Mary the brilliant neuroscientist.<sup>1</sup> Mary has always been confined to living in a black-and-white room with a black-and-white TV and (we'll assume) without any windows. She has even always been painted with black and white paint all over. As a neuroscientist, Mary knows all there is to know about the physical nature of the world, including the workings of human perception, the physics of light rays and colors, the working of the human retina, the biological working of the eyes and so forth. One fine day Mary is released from her black-and-white room and sees a red flower for the first time. Now, many people have the intuition that Mary learns something new upon seeing a red flower for the first time, even though she knew everything there is to know about the nature of the physical world. An expression that might approximately capture what she just learned could be: '*this* is what it is like to see red'. In other words: Mary would learn what it is like to have an experience of seeing red. Now, if it would be the case that Mary would learn something new *and* if it also would be the case that she already knew everything physical there was to know about the natural world, then this would mean that all the physical information or, all the physical knowledge, leaves something out. If this is true, it would seriously undermine the theory of physicalism.

Now the question is whether the knowledge argument is the same argument as our argument from perspective? If (S2) is interpreted in the sense of (PV6), i.e. if (S2) is interpreted as (S2'), I think that these arguments are very similar. According to (S2'), what it is like to have a particular experience E can only be known if one has had experience E, which is also what the knowledge argument contends. One can only know what it is like to see red if one has seen red. Even if one would possess all knowledge of the physical world, like Mary does, having an experience of actually seeing red will add to this knowledge, which means that the knowledge was incomplete before the experience of seeing red. The argument from (S2') is thus very similar to the knowledge argument. This means that it is very likely that this argument

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<sup>1</sup> Jackson 1982.

is susceptible to all the same objections as the knowledge argument. Which objections have been raised against the knowledge argument?

In order to systematically discuss the objections against the knowledge argument, which also apply to the argument from (S2'), it helps to formalize the argument. Stoljar and Nagasawa present a version of the logical structure of Jackson's knowledge argument.<sup>2</sup> Jackson himself has called this reconstruction to be 'convenient and accurate'.<sup>3</sup> This is what it looks like:

### Knowledge Argument

1. Mary (before her release) knows everything physical there is to know about other people.
2. Mary (before her release) does not know everything there is to know about other people (because she learns something new about them on being released).
3. Therefore, there are truths about other people (and herself) that escape the physicalist story.<sup>4</sup>

Over the years, many kinds of physicalist replies to the knowledge argument have been proffered. These are strategies that are supposed to deny or avoid the conclusion of the knowledge argument and at the same time explain the dualist intuition it triggers. Van Gulick has organized these physicalist and naturalist responses around a number of questions in his paper "So many ways of saying no to Mary".<sup>5</sup> In what follows, I will stick to his categorization; however, I will do so in terms of statements rather than in terms of questions (as Van Gulick does). Here are the responses as organized by Van Gulick in short:

1. Mary does not learn anything new after release from her black-and-white room.
2. Mary only gains know-how.
3. Even though Mary learns something new after her release, this is not factual learning. This means that Mary does not learn new facts and/or propositions but merely old facts or propositions in a new way.

<sup>2</sup> In fact two formalizations are presented. I am here sticking to the first one.

<sup>3</sup> In Stoljar and Nagasawa 2004: 13. And: Jackson 1986: 293.

<sup>4</sup> Stoljar and Nagasawa 2004: 13-14.

<sup>5</sup> Van Gulick 2004.

4. Mary only learns a new proposition on a fine-grained mode of individuation, which means that physicalism is not refuted.<sup>6</sup>

Since these objections all apply to the argument from (S2'), I will briefly discuss each of these responses. I will describe them and explain which premise of the argument they reject.

The first physicalist response to the knowledge argument is that Mary does not learn anything new after her release. Why does Mary not learn anything new, according to this strategy? Because she already knew everything there was to know about experience by way of her 'physical knowledge', and there was nothing to learn from having the experience itself at all. This strategy denies the second premise of the argument, which is that Mary did not yet know everything there was to know before her release. For example, Churchland thinks that Mary does not learn anything new at all upon release out of her black-and-white room.<sup>7</sup>

The second response to the knowledge argument, according to which Mary only gains know-how, is called the ability hypothesis. Philosophers who defend the ability hypothesis are, among others: Lewis, Nemirow and the new Jackson.<sup>8</sup> These philosophers deny that Mary gains propositional knowledge, or any substantial kind of knowledge, but think that her experience merely enables her to recognize similar experiences (say, of seeing red objects) in the future and to apply the right concepts (in this case 'red') to the appropriate experiences. On this account, Mary does gain something but it is not the case that physicalism leaves anything out. What Mary learns or gains is merely a tool for color or experience recognition and concept application which helps her to organize her experiences and to develop strategies for doing so in the future.

According to the third strategy, Mary just learns old propositions in a new way. Philosophers who think that Mary just learns old propositions in a new way are, among others: Tye, Horgan and Papineau. There are at least three ways in which this third strategy, that Mary learns an old fact in a new way, can be spelled out. These subjectivity-strategies do not occur on Van Gulick's list, but are helpful to consider anyway. Here they are:

- 3a. Mary only gains knowledge by acquaintance.
- 3b. Mary only gains a new phenomenal concept.

<sup>6</sup> After Van Gulick 2004: 370, figure 17.1.

<sup>7</sup> Churchland 1985.

<sup>8</sup> The 'new Jackson' represents Jackson after his change of mind concerning the knowledge argument, cf. Ludlow, Nagasawa, Stoljar (eds.). 2004.

- 3c. Mary only acquires a feeling of what it is like to have a particular experience.

Strategy 3a is a popular strategy. According to it, Mary does gain new knowledge, but this is not propositional knowledge, but knowledge by acquaintance. This would mean that the propositional physical information or knowledge about the natural world is complete, after all: there is no propositional knowledge that Mary lacks. All Mary lacks is knowledge by acquaintance and that makes sense since she has never had the experience of seeing red before. It is generally accepted that the only way to get knowledge of acquaintance of a particular experience is by having (had) that experience.

Strategy 3b is also a very popular strategy, which is defended by, for example, Papineau in his book *Thinking about Consciousness*.<sup>9</sup> The idea of this strategy is that Mary does not gain any physical propositional knowledge but all she gains is a phenomenal concept. This means that Mary does gain new knowledge, but only new knowledge of old facts. But what is this phenomenal concept? A phenomenal concept is a concept that one acquires from experience which enables one to recognize the phenomenal character of an experience. When Mary sees red for the first time she gains a phenomenal concept, which enables her to recognize what it is like to see red when she sees red again in the future.

Strategy 3c is the strategy of philosophers who think that the existence of qualia is in fact compatible with methodological naturalism, often holding that 'what it is like' to have experiences does not contain any propositional content. 'What it is like' is just some 'feeling' that comes with having experiences. If it is the case that 'this feeling' exists and if it couldn't be part of a physicalist account, then still nothing substantial would be left out of such a physicalist account.

The fourth strategy, that Mary learns something new that nevertheless does not entail that physicalism is false, is among others defended by Lycan (1990) and Loar (1990). The idea here is that propositions can be individuated in different ways: fine-grained or coarse-grained. Coarse-grained propositions are functions from possible worlds to truth-values. Propositions expressed by the sentences ' $2+2=4$ ' and ' $4+4=8$ ' are the same proposition under this interpretation since both propositions are true in every possible world. However, if one uses a fine-grained mode of individuation, then two propositions are only identical if their constituent structures match. The structure of propositions is determined by the concepts that they are made up of. Now, if Mary only learns

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<sup>9</sup> Papineau 2002.



a new proposition on the fine-grained mode of individuation of propositions, then this does not entail that physicalism is false. Mary can simply have acquired a new concept, but, on a coarse-grained interpretation, the proposition she learns would still be identical to a proposition that is (and was) part of her physical knowledge.

We have seen a number of prominent kinds of objections against the knowledge argument. Naturally, many kinds of replies have been offered to counter these objections. Since it would take too much time and space to respond to all these objections and counter-objections, I think what we should say here is this. Whether or not (S2') is compatible with methodological naturalism, in the end, depends on the outcome of the qualia debate in which the knowledge argument, these objections and the replies are all discussed. Possibly, the knowledge argument is a problem for naturalism and, if it is, (S2') is so as well. But because there is a huge debate and amount of literature out there discussing exactly this, I proffer we move on and see if the other senses in which experiences are subjective are a problem for naturalism or not.

Before concluding this section, we need to address the question how the qualia debate exactly relates to the debate about subjectivity. The qualia debate is part of the debate about subjectivity. The debate about subjectivity is a fragmented debate, since the term 'subjectivity' is so vague and interpreted in so many different ways (as we have seen in Chapter 1). One interpretation of the subjectivity of experience is that the subjective-making property of experience is identical to the experience's phenomenal character. If the subjectivity of experience should be understood as the phenomenal character of experience, and not in any other way, then the debates would be the same. However, it seems that the term 'subjectivity' of experience is broader and can also be understood in all the other ways that we have discussed in Chapter 1. The debate about subjectivity is thus broader and more encompassing: it includes the qualia debate, but also includes many other debates, viz. the ones that will be the topics of the next sections.

However, it should be pointed out that not everyone agrees with this position and there has been discussion about the question whether the phenomenal character of experience and the subjectivity of experience are in fact the same properties of experience. Even though I think that they are not, since 'subjectivity of experience' is also used to refer to different properties of experience, I want to mention a couple of the different positions that are taken with respect to this issue. Here are two opposed visions.

According to Georgalis (2006) qualia and subjectivity are different:

I illustrate and oppose an almost universal tendency, even among widely divergent theorists of mind, to conflate consciousness or subjectivity, on the one hand, with phenomenal experience, on the other. Of course it is true that phenomenal experience is subjective and (if not always, often) conscious. My point is that subjectivity and consciousness do not occur only in phenomenal experience; they are as strongly implicated in intentionality.<sup>10</sup>

Georgalis' point is that phenomenal experience is subjective, but we should not identify experience's phenomenal character with its subjectivity, since not only experience but also other phenomena, such as intentionality, are subjective. This is a good reason to think that phenomenal character should be distinguished from the subjective-making property of experience, since intentionality might not have phenomenal character, but is subjective also.

However, according to for example Searle, qualia and the subjectivity of experience are one and the same property of experience:

But of course, all conscious phenomena are qualitative, subjective experiences, and hence are qualia. There are not two types of phenomena, consciousness and qualia. There is just consciousness, which is a series of qualitative states.<sup>11</sup>

As this passage makes clear, Searle does not only think that the subjectivity of experience is identical to its phenomenal character but he thinks that consciousness simpliciter, or experiences simpliciter, are identical to qualia. To repeat, he thinks that experiences are identical to their phenomenal character.

Now, I have already made clear what I think of the matter, which is that phenomenal character is one way to understand what it means for experience to be subjective but not necessarily the only or the right way. There are other ways in which we understand and use the term 'subjectivity of experience', which I will address in the next few sections. But before moving on to the next definition of experience, we need to address one more important question, viz. is the argument from (S2') the same argument as Nagel's argument? I will answer this question in the next section.

### 5.2.3 Nagel's Argument

Another important question that needs to be addressed is whether the argument from perspective is the same argument as Nagel's argument, or if these arguments are different. The present section concerns this matter.

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<sup>10</sup> Georgalis 2006: 61.

<sup>11</sup> Searle 1997: 9.

Nagel thinks that the fact that experience is subjective in the sense that (S2) spells out causes the subjectivity of experience to be incompatible with physicalism.<sup>12</sup> Nagel formulates an argument against physicalism based on this incompatibility and in the following I'll discuss Nagel's argument and then see if it is the same argument as the argument from perspective.

In short, Nagel's argument is that the physicalist cannot fully grasp or understand experiences, since the program of physicalism is committed to achieving an objectivist view on reality, which necessarily leaves any particular point of view behind. Since experiences can only be fully grasped from a particular, subjective point of view, the physicalist will never be able to include subjective experience in its account of reality. Here is Nagel's argument reconstructed in a more formal form.

### Nagel's Argument

1. The physicalist view of reality is an objective view of reality. [assumption]
2. An objective view of reality cannot include particular points of view. [assumption]
3. Therefore, the physicalist view of reality cannot include particular points of view. [1, 2]
4. An account of experience can be given only from particular points of view. [assumption]
5. Therefore, the physicalist view of reality cannot give an account of experience. [3, 4]

In order to be able to answer the question whether this argument is the same argument as the argument from perspective, which we discussed in section 5.2.1, we need to understand each premise of Nagel's argument and the terms that he uses in it.

The first premise is that 'the physicalist view of reality is an objective view of reality'. What does Nagel mean by an 'objective view' of reality, which he sometimes also calls 'an objectivist view'? An objective view of reality, or an objectivist view, is a view of reality that leaves behind any particular point of view. According to Nagel, objectivity is a 'method of understanding':

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<sup>12</sup> I will discuss whether Nagel's physicalism is sufficiently similar to methodological naturalism below.

To acquire a more objective understanding of some aspect of life or the world, we step back from our initial view of it and form a new conception which has that view and its relation to the world as its object.<sup>13</sup>

And:

A view or form of thought is more objective than another if it relies less on the specifics of the individual's make-up and position in the world, or on the character of the particular type of creature he is.<sup>14</sup>

According to Nagel, physicalism is a view that aims to achieve an objective understanding of the world. Since Nagel uses the term 'physicalism' and we have been talking about methodological naturalism, we need to pause for a moment to see what Nagel's claim means in our terms. Is Nagel's physicalism sufficiently similar to our methodological naturalism? According to Nagel, physicalism is 'committed to achieving an objectivist view on reality, which necessarily leaves any particular point of view behind.' Is this kind of physicalism similar to our methodological naturalism? We can clearly see that it is. After all, our methodological naturalism requires, in similar fashion, that for anything to exist it has to be intersubjectively available. This can be put differently, but meaning the same, as a view that is 'committed to achieving an objectivist view on reality.' So, according to Nagel, methodological naturalism is committed to leaving behind any particular point of view, whereas experience is very much connected to, and dependent on, a particular point of view. Experience and its phenomenal character can therefore not be understood from a methodological naturalist's perspective and cannot be part of a methodological naturalist's account of the world.

The second premise of the argument is: An objective view of reality cannot include particular points of view. We have just seen what an 'objective view of reality' is, but what is a point of view again? In the first chapter, we established that by a 'point of view' Nagel does not mean a token single point of view, i.e. the point of view of one individual, but a type point of view, i.e. a point of view that can be taken up by several individuals. The definition according to which subjective experience is connected to a token point of view, which would mean that experience is private, will be discussed in the next section. A type point of view can be taken up by more than one individual. Just which individuals are able to take up the same point of view is a question we have

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<sup>13</sup> Nagel 1986: 4.

<sup>14</sup> Ibid.: 5.

considered in detail in our discussion of (PV1)-(PV6) in the first chapter. (PV6) seemed the best description of which individuals are able to take up a single point of view: they have to have had an experience with the same phenomenal character. However, it seems that Nagel's interpretation of 'point of view' is richer than (PV6). What is Nagel's interpretation of a 'point of view'?

In order to understand better what Nagel means by a 'point of view', it will be helpful to delve a little deeper into Nagel's idea that experience and a single point of view are essentially connected. As we have seen in Chapter 1, this means that there is a necessary relation between experience and a point of view: i.e. a single point of view is a necessary condition for there to be any experience (or in other words: there cannot be experience without there being a point of view) and experience is necessarily (and thus always) experience from a particular point of view. It is also implied that there cannot be a point of view without there being something it is like for someone to take up this point of view, i.e. as soon as there is a point of view, there is something it is like to have experiences from this point of view.

But Nagel's claim goes even further than this. The relation between experience and a single point of view is necessary and essential in the sense that there is nothing left of experience if you take its particular point of view away. This might seem puzzling at first. What does this mean exactly? Nagel puts it this way:

It is difficult to understand what could be meant by the objective character of an experience, apart from the particular point of view from which its subject apprehends it. After all, what would be left of what it was like to be a bat if one removed the viewpoint of the bat?<sup>15</sup>

In this passage, Nagel makes it clear that if one were to remove the viewpoint of an organism on a particular experience, there would not be anything left that would make that particular experience that particular experience. Nagel does not intend to merely make the trivial claim that without a particular subject (with a certain point of view) this subject's experiences would not (have) exist(ed). That is to say: Nagel does not only think that experiences are ontologically dependent on the subjects who have them. Nagel means to make a much stronger claim. Not only does the existence of an experience depend on its subject, also, and moreover, what that experience is like (in other words, its nature) depends on the subject. It is not the case that there is

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<sup>15</sup> Nagel 1974: 443.

a fact to the matter of what an experience is like that can be accessed or known by different subjects who differ dramatically (so as to not be able to take up the same point of view). There is no nature an experience has independent of being experienced. So, experiences are not only ontologically dependent on the subjects who have them but also qualitatively.

The third premise of the argument, 'the physicalist view of reality cannot include particular points of view', is not an assumption in need of justification, but follows from the first and second premise together. We therefore do not need to discuss it further. The fourth premise of the argument is: 'An account of experience can be given only from particular points of view.' Why would we think this premise is true?

Nagel thinks that even if a human being would mimic certain typically bat-like experiences, such as hanging upside down from the attic by one's feet, then still, this person would only know what it is like for a human being to have that particular experience – not what it is like for a bat. The bat and the human being are so vastly different, according to Nagel, that even when they are put in similar situations so as to have maximally similar experiences, their experiences do not even resemble one another at all. Needless to say, our intuitions can differ at this point. What is of importance here is that, according to Nagel, experience is essentially subjective in this way, viz. in the sense that experiences are qualitatively dependent on the subjects who have them.

Nagel further explains the point that experience is essentially subjective by explaining how experience is essentially not-objective, i.e. experience does not have objective character, where 'objective' should be interpreted as the exact opposite of 'subjective', viz. as follows:

(O10) X is objective =df. X is accessible from many different points of view.<sup>16</sup>

Not only is experience essentially subjective; according to Nagel experience is essentially not-objective, where 'objective' is defined as in (O10). That is to say, experience lacks the kind of nature that can be grasped from several different points of view. As Nagel puts it:

Experience does not have, in addition to its subjective character, an objective nature that can be apprehended from many different points of view.<sup>17</sup>

<sup>16</sup> N.B.: Definition mine, not Nagel's.

<sup>17</sup> Nagel 1974: 443-444.

This means that experience can only be fully understood from one point of view. As I have argued in the first chapter, I think we can call this point of view a ‘first person point of view’. In any case, the kind of understanding we have of experience is thus a subjective understanding. Or, in other words, the only accurate view that we can have on experience is a subjective view. Nagel thinks that the distinction between a more subjective and more objective view (or understanding of something) is a matter of degree. He writes:

A view or form of thought is more objective than another if it relies less on the specifics of the individual’s make-up and position in the world, or on the character of the particular type of creature that he is. The wider the range of subjective types to which a form of understanding is accessible – the less it depends on specific subjective capacities – the more objective it is. A standpoint that is objective by comparison with the personal view of one individual may be subjective by comparison with a theoretical standpoint still farther out.<sup>18</sup>

Now, given this account of the relation between subjective and objective views, this means that a more objective understanding of a particular experience is one that is less attached to one particular point of view (i.e. less subjective). However, as we have seen, experience can be fully understood only from one point of view: to know what it is like to have a particular experience, you have to have had the experience yourself and so be able to take up the same point of view. Therefore, any objective understanding is by definition a lesser understanding of the experience. In Nagel’s words:

If the subjective character of experience is fully comprehensible only from one point of view, then any shift to greater objectivity – that is, less attachment to a specific viewpoint – does not take us nearer to the real nature of the phenomenon: it takes us further away from it.<sup>19</sup>

This line of argument can be summarized by the following rhetorical question:

Does it make sense, in other words, to ask what my experiences are really like, as opposed to how they appear to me?<sup>20</sup>

This concludes our explanation and justification of the premises of Nagel’s argument. Now, is this a good argument against methodological naturalism? The argument seems to be valid, but are all its premises true? I think the first

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<sup>18</sup> Nagel 1986: 5.

<sup>19</sup> Nagel 1974: 444–445.

<sup>20</sup> Ibid.: 448.

two premises are pretty solid. We have seen that methodological naturalism is indeed committed to ‘achieving an objectivist view on reality’ and it does seem to follow from this that particular points of view are left behind – at least, I cannot see a way in which this would not be so. But is the third premise true? Is it the case that experiences can only be fully grasped and understood from a particular point of view? We have seen in Chapter 1 that indeed experiences can only be fully grasped from a first person point of view, which is expressed by definition (S4). This argument is a serious threat for methodological naturalists.

There might be another argument in Nagel, which would be an argument that is directed at physicalism rather than at ‘objectivity’. The argument occurs in the following passage:

For if the facts of experience – facts about what it is like for the experiencing organism – are accessible from only one point of view, then it is a mystery how the true character of experience could be revealed in the physical operation of that organism. The latter is a domain of objective facts *par excellence* – the kind that can be observed and understood from many points of view.<sup>21</sup>

The argument here is different from the argument we have just considered, though the idea behind it is very similar. In the previous argument the point was that subjective experience cannot have its place, be accounted for or understood on any objectivist view of reality, since such a view requires leaving any particular point of view behind, the kind of point of view that is connected to subjective experience. The present argument is not directed at any objectivist view, but at physicalism in particular. Take two cases (i) and (ii): In case (i), Jill knows about her experience of smelling a sweet flower because she is having the experience. In case (ii), a brain scientist knows about Jill having the same experience by studying her brain scan. Now, in this passage, Nagel says that he thinks that there is a difference between these two cases. Moreover, he says that he thinks that it is a mystery how in case (ii) the ‘true character’ of the experience could be revealed at all. His reason for thinking this is that the physical operation of the organism is ‘a domain of objective facts’, while experience is subjective in the sense of being essentially connected to a particular point of view.

Even though this is a good argument against methodological naturalism, in the following I will continue discussing the argument we previously encountered. Why? Because the second argument is an instance of the first and will automatically follow if the first works. That is: the first argument is an

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<sup>21</sup> Ibid.: 442.



argument against any objectivist view, so if that argument works, the second argument, against a particular objectivist view (viz. physicalism) will work as well.

Back to the first argument. Georgalis has discussed this argument and since his take on it is very interesting, I am copying his discussion below:

Nagel maintains that an objective physical theory must abandon a single point of view. In a sense I agree with this, but I do not think that this eliminates the possibility of giving an objective account of the subjective point of view. However, if we rely on a narrow construal of “objective”, one that constrains it to what is obtainable by *strictly* third-person methodologies, there cannot be an objective account of the subjective. Since both phenomenal and intentional features are in part constituted by a first-person perspective, there are facts that are accessible only from a subjective point of view, and there is no way that a theory exclusively employing third-person concepts can adequately accommodate them. Therefore, an adequate account of minds must be supplemented with a first-person methodology.<sup>22</sup>

Georgalis thus agrees with Nagel that there cannot be an objective account of the subjective, if ‘objective’ is narrowly defined as ‘constrained to what is obtainable by strictly third-person methodologies’. This is very similar to the way Nagel interprets objectivity and to the way we have interpreted it. Georgalis thinks that a first-person methodology is necessary to supplement third-person methodologies.

Nagel and Georgalis are not the only ones to recognize that experience is ‘essentially connected to a single point of view’. As we have seen in the first chapter, there are a couple other philosophers who think that the subjectivity of experience should be understood in exactly this way. I am thinking of Searle and Farkas. Both these philosophers use terms slightly different from the ones employed in (S2). They both put the same point in terms of ‘perspective’; to recall:

The world itself has no point of view, but my access to the world through my conscious states is always perspectival.<sup>23</sup>

And:

An explanation of this circumstance is offered by the observation that mental facts are perspectival facts.<sup>24</sup>

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<sup>22</sup> Georgalis 2006: 93.

<sup>23</sup> Searle 1992: 95.

<sup>24</sup> Farkas 2009: 31.

Since I think that it expresses fairly the same idea to say that mental facts are perspectival facts and that mental states are essentially connected to a single point of view, Searle and Farkas' arguments can be seen as parallels to Nagel's argument – just as Georgalis' argument is.

This is a very strong argument against methodological naturalism as we have found it: how can this objectivist theory leave room for subjective experience, if subjective experience is perspectival, or 'connected to a single point of view' or, as Georgalis puts it, when 'both phenomenal and intentional features are in part constituted by a first-person perspective' and 'there are facts that are accessible only from a subjective point of view'? This means that methodological naturalism is false or, in any case, limited such that it excludes the area of the mental.

Now, is Nagel's argument the same argument as the argument from perspective? In comparing these arguments there are a few differences worth noting. First, obviously very different language is used in Nagel's argument and in the argument from perspective. This makes the arguments sound very different, though that might be a superficial rather than a substantial difference. Second, the argument from perspective (as well as the knowledge argument) is formulated on the level of an individual, whereas Nagel's argument is set at the level of 'theories'. For simplicity, let's use the knowledge argument as an example here (which, as we have seen, runs very similar to the argument from perspective). The knowledge argument is phrased in terms of Mary possessing all physical knowledge and then having a personal experience which, supposedly, adds to this knowledge. Nagel's argument is not staged at the level of the individual but at the level of 'theories': physicalism is supposed to provide us with a complete theory of the physical knowledge. But, according to the argument, only from a particular, subjective point of view, can experience really be understood and so, if these subjective points of view would be taken into account, supposedly knowledge would be added to the physicalist theory. Despite these differences, I think we can say that the knowledge argument and Nagel's argument are very similar. Both arguments contend that physicalism (or methodological naturalism, or 'objective' views) does not provide a complete account or complete knowledge of the (physical) world because there is something one learns from, or only knows by, having experiences (from a first person point of view). As said above, there are obvious differences in language and the level at which the argument is set differs. However, I think the gist of the arguments is very similar.

5.3 (S<sub>3</sub>): ARGUMENT FROM PRIVACY

Next, I will discuss the (in)compatibility of methodological naturalism with the following definition of subjectivity:

(S<sub>3</sub>) E is subjective =df. E is private.

As we have seen, this definition of the subjectivity of experience can be formulated more formally as follows:

(S<sub>3'</sub>) E is subjective =df. For all subjects S, if S has E, then only S has E.

This means that experiences are subjective in the sense that only one individual can have a particular token experience. As we established before, a(ny) token experience can only be had by one individual, which is to say that token experiences are private. As I made explicit, this definition of the subjectivity of experience is about tokens, whereas definition (S<sub>2</sub>) is about types of experiences.

According to (S<sub>3</sub>), token experiences are private, which means that only one individual can have any token experience. Now, what does it mean to have an experience? One might think that a distinction needs to be made between having an experience in (a) an epistemic sense and having an experience in (b) an ontological sense. If one interprets having an experience in (a) an epistemological sense then what it means to have an experience is to be aware of the experience or to be acquainted with it. If one interprets having an experience in (b) an ontological sense, then the term 'having' indicates the relation that obtains between the property instance and the object that has it, i.e. between the person and the token experience. In this section, I will interpret (S<sub>3</sub>) and 'having an experience' in an ontological sense. I will do so because in the formulation of (S<sub>3</sub>) no epistemic terms are used. Moreover, I interpret (S<sub>4</sub>), which is a very similar definition to (S<sub>3</sub>), as (S<sub>3</sub>)'s epistemological counterpart (a). The epistemological 'having of an experience', (S<sub>4</sub>), will therefore be discussed in the next section.<sup>25</sup>

<sup>25</sup> Even though 'having an experience' can be explained in an epistemic and in an ontological sense, it is not clear if the concept of 'having an experience' actually breaks apart like that. In real life, it seems like it doesn't. After all, one cannot have an experience in an ontological sense (i.e. stand in an ontological relation to a token experience) without being aware of having the experience. What it is to have an experience just *is* being aware of having that experience. However, the fact that one cannot consider these aspects separately in daily life

The fact that only one person can have a particular token experience is a metaphysical fact, not a nomological one. It's not just a fact of nature that token experiences are not available to more than one person. A token experience, given what it is, could not possibly be had by more than one person. This case is just an instance of a general phenomenon: generally, property instances cannot be shared; token experiences are an instance of this general principle.

Now that we know what (S<sub>3</sub>) means, the question is: is experience subjective in this sense? As we briefly discussed in Chapter 1, it would be if there are examples of experiences being subjective in this way. Are there such examples? There are plenty of examples of the fact that experience is subjective in the sense of (S<sub>3</sub>); in fact, every experience is an example of (S<sub>3</sub>). After all, for any particular token experience (with its phenomenal character), there is only one person who can have it. Conrad puts it as follows:

A particularly salient feature of conscious mental states is that people do not share one and the same such state; they are exclusive or 'private' to one individual.<sup>26</sup>

Examples of such private experience tokens include the fact that only I can have *my* experience of seeing a red flower and only I can feel *my* headache. As Tye writes:

My pains, for example, are necessarily private to me. You could not feel any of my pains.<sup>27</sup>

Velmans describes the privacy of experience like this:

I do not have direct access to your experiences and you do not have direct access to mine. For example I cannot experience your pain, your thoughts, your colour qualia, the way your body feels to you, the way the sky looks to you, the way I look to you, and so on. I can only have my own experiences (however well I empathise). The privacy and subjectivity of each individual's experience is well accepted in philosophy of mind. It seems to be a fundamental given of how we are situated in the world.<sup>28</sup>

This passage supports definition (S<sub>3</sub>) as a definition of the subjectivity of experience and it also offers several examples of how (token) experiences and their phenomenal character are only had by one person. Naturally, these *types*

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does not mean that a theoretical distinction should not be drawn. I will therefore leave it open whether there is a substantial difference here.

<sup>26</sup> Conrad 1996.

<sup>27</sup> Tye 1990: 71.

<sup>28</sup> Velmans 1999: 2–3.

of experiences can be had by more than one individual, i.e. not only I have experiences of seeing a red flower and I am not the only one to have experienced headaches; others have similar experiences, which are similarly private.

The next question we need to answer is whether the fact that token experiences are subjective in this sense, i.e. private, is compatible with methodological naturalism. As we have found, methodological naturalism is the thesis that the only things which exist are those things which are intersubjectively available (i.e. accessible to more than one person). It seems, then, that we have an outright incompatibility here.

The considerations about the privacy of token experiences lead us to the following argument against methodological naturalism based on definition (S<sub>3</sub>), which I will call the ‘argument from privacy’.

#### The Argument from Privacy I

1. There are token experiences. [Chapter 2]
2. A token experience can be had only by one person. [Chapter 1]
3. A token experience is accessible only to the person who is having that experience. [Chapter 1]
4. There is something that is only accessible to one person. [1, 2, 3]
5. If naturalism is true, then everything that exists is intersubjectively available, i.e., accessible to more than one person. [Chapter 4]
6. Therefore, methodological naturalism is false. [4, 5]

This argument is formulated in terms of access. However, it might be objected that access talk suggests that experiences are objects that we somehow have access to and that it would be better to talk about us ‘having experiences’ than about ‘accessing experiences’. The argument from privacy can also be formulated without reference to access:

#### The Argument from Privacy II

1. There are token experiences. [Chapter 2]
2. A token experience can be had only by one person. [Chapter 1]
3. Experience tokens which are had only by one person are not intersubjectively available. [Chapter 1]
4. There is something that is not intersubjectively available. [1, 2, 3]
5. If methodological naturalism is true, then everything that exists is intersubjectively available. [Chapter 4]
6. Therefore, methodological naturalism is false. [4, 5]

How could the methodological naturalist avoid this conclusion? There are several options open to him, as he could deny each premise of the argument. Since the arguments are obviously very similar, the premises that I will be referring to are the premises from either argument. Let's consider these different options.

The first option open to the naturalist is to deny the first premise, namely that there are token experiences. I argued for the existence of token experiences in Chapter 2 and I will rest my case here. The second option is to deny the second premise, which is the principle of privacy. As I have indicated before, I cannot see how anyone could hold or defend that more than one person could have a particular token experience.

The third way for the naturalist to avoid the conclusion that their theory is false is by denying the third premise that experience tokens are not intersubjectively available, but only accessible to one person. One popular way of denying this is by arguing that the identity theory is true. If the identity theory would be true, then experiences are possibly intersubjectively available. Since this is an important objection against my overall argument, I will discuss the identity theory extensively in section 5.6.2.

The fourth option open to the naturalist to avoid this problem is to deny the fourth premise, which is our account of methodological naturalism. Since I have argued for this interpretation of naturalism extensively in the previous two chapters, I will here, again, rest my case. The naturalist could nevertheless argue that this is not the right interpretation of methodological naturalism and try to defend either metaphysical naturalism or a different version of methodological naturalism. Since I do not think that either of these enterprises could be successful, I will not discuss this any further.

Denying any of the premises thus only gets the naturalist so far, but there is another kind of objection to this argument, which is the objection from unobservables. One way the naturalist can reply to this argument is by saying that there are a number of things that we cannot observe, which he nevertheless thinks exist and thinks he is justified to believe in. Examples of such unobservables, or things that we cannot observe, but of which the naturalist thinks they exist, include: other galaxies, electrons, a cat in a box, etc.

Now, this might seem to be a good objection at first, but there is an important way in which these cases are not analogous to our case of experience and its phenomenal character. Here is where the analogy breaks down: even though it is logically impossible for more than one person to have access to token experiences (and their phenomenal character), or in other words, even though it is logically impossible for token experiences to be intersubjectively available, it is not logically impossible for other galaxies, electrons and cats in

boxes to be intersubjectively available, or for more than one person to observe those. Granted, there are other, more fundamental problems with observing these specific entities, but once or if one person could observe another galaxy, others could as well. And if one person could observe an electron, then in principle another person could do so as well. The point is that there is nothing in principle that makes that these entities are not intersubjectively available. It is not the case that one subject has some sort of privileged access to these entities, as is the case with experience and phenomenal character. Intersubjectively available in this context thus means ‘possibly intersubjectively available’.

It seems, then, that this sense in which experience is subjective is incompatible with methodological naturalism and this incompatibility can be used to formulate an argument against methodological naturalism, as we have just seen.

#### 5.4 (S4): KNOWLEDGE OF EXPERIENCE

According to definition (S4), experiences are subjective in the sense that they can only be known from a first person point of view:

(S4) E is subjective =df. E can only be known from a first person point of view.

We have already discussed what points of view are, but what is a first person point of view? A first person point of view is the point of view of the person having an (type or token) experience. This person can talk truly in the first person (i.e. using first person language) about his or her experience. According to definition (S4), only the person having a particular (type or token) experience can know the experience. In other words: experiences can only be known by one person, which is the person having the experience.

What does it mean to ‘know an experience’? There are at least two options. The first option is that ‘knowing an experience’ means the same as ‘knowing what it is like to have an experience’. Knowing an experience would then be the same thing as knowing the phenomenal character of that experience. If this is the case, then we have already discussed this interpretation of the subjectivity of experience in sections 5.1 and 5.2 where we discussed (S1) and (S2). However, the second option is that ‘knowing an experience’, in the sense of (S4), does not have anything to do with phenomenal character and

is different than 'knowing what it is like'. Since we have already discussed the first option, in this section I will consider the second option, viz. that 'knowing an experience' is different than 'knowing what it is like to have an experience'.

Even if (S<sub>4</sub>) is interpreted in this second way, (S<sub>4</sub>) is still closely related to subjective-making properties (S<sub>2</sub>) and (S<sub>3</sub>). According to (S<sub>2</sub>), experience is essentially connected to a single point of view. The fact that experience is essentially connected to a single point of view is a necessary but not a sufficient condition for the fact that experience can only be known from a first person point of view. After all, if experience was not essentially connected to a single point of view, then it could not be the case that experience can only be known from a first person point of view. Subjective-making property (S<sub>3</sub>) is also a necessary condition for (S<sub>4</sub>): experience can only be known from a first person point of view because experience is private. The point to be made about (S<sub>4</sub>) is similar to the point made by Nagel's argument. Nagel's point was that there cannot be an objective understanding of subjective experience. The point that we are making here, that experience can only be known from a first person point of view, is similar, yet different.

Now, before we can assess whether (S<sub>4</sub>) is compatible with methodological naturalism, we need to know what kind of knowledge is involved in (S<sub>4</sub>). What kind of knowledge do we have of our experiences? As we already discussed in Chapter 2, Byrne makes the correct and interesting point that we do not literally observe our experiences. But if we do not observe our experiences, then how do we know about them? That is, how do we know that we are having experiences and how do we know which experiences we are having? I will briefly discuss two accounts of how we (come to) know our experiences below: Perry's and Feigl's.

According to Perry, experiences are epistemically accessible to us just because we have them:

*Having* an experience, that is, merely being in a state that has a subjective character, makes the experience epistemically accessible to us.<sup>29</sup>

He puts the same point again as follows:

We have experiences, and it is like something to have them. To have them is not to know anything about them or think about them or be conscious of them or be aware

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<sup>29</sup> Perry 2001: 48.



of them. It is simply to have them. But having them puts us in a position to attend to them, be aware of them, think about them, know things about them, form concepts of them, and so forth. Our experiences are epistemically accessible to us.<sup>30</sup>

If experiences are epistemically accessible to us, this means that we can have knowledge of them. What kind of knowledge do we have of our experiences? The most plausible idea is that the knowledge that we have of our experiences is ‘knowledge by acquaintance’, a term which goes back to Russell. It is not propositional knowledge, or know-how, but the kind of knowledge we have of, for example, other people or (non-propositional) objects. If one has knowledge of acquaintance of other people, this does not mean that one knows facts about them, but that one knows *them*. We not only have knowledge of acquaintance of other people, but also of material objects and their properties and of mental states, such as experiences.

Despite the fact that it is very commonly thought that the kind of knowledge we have of our experiences is knowledge by acquaintance, there are other options. For example, Feigl has an alternative view. Feigl thinks that the relation we stand in to our experiences is a relation of ‘acquaintance’, not ‘knowledge by acquaintance’. Here is how Perry describes Feigl’s view:

Feigl calls the relation our own experiences bear to us, in virtue of which we can know about them, “acquaintance”. Acquaintance itself is not knowledge. He distinguishes it sharply from knowledge by acquaintance; that is what you get by paying attention to and thinking about the experiences with which you are acquainted.<sup>31</sup>

It seems as though Feigl distinguishes an extra step before one obtains ‘knowledge of acquaintance’, which he simply calls ‘acquaintance’. When you go on to reflect on the experiences you are acquainted with, you obtain knowledge of acquaintance of your experiences.

The accounts of Perry and Feigl are a little bit different, but also very similar. I think we can say that they use different terms and language to describe the same, or a very similar, phenomenon.

After this discussion of the kind of knowledge that is involved in (S4), we can now answer the question whether (S4) is compatible with methodological naturalism. It seems that the subjective-making property (S4) is incompatible with methodological naturalism. We have found that experience is subjective in the sense specified by (S4), which means that experience tokens can

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<sup>30</sup> Ibid.

<sup>31</sup> Ibid.

only be known from a first person point of view. But things which can only be known from a first person point of view cannot be known from more than one point of view. We have already established that what it means for something to be intersubjectively available is for it to be capable of being known from more than one point of view. This means that experience tokens are not intersubjectively available but, as we established in Chapter 2, they do exist. According to methodological naturalism, everything that exists is intersubjectively available. Methodological naturalism is thus false. Here is the argument in a more formal form:

#### Argument from Knowledge of Experience

1. There are experience tokens which are known only from a first person point of view. [Chapters 1 and 2]
2. If there are things that can only be known from a first person point of view, then those things cannot be known from more than one point of view.
3. If something cannot be known from more than one point of view, then it is not intersubjectively available.
4. Experience tokens are not intersubjectively available. [1, 2, 3]
5. If methodological naturalism is true, then everything that exists is intersubjectively available. [Chapter 4]
6. Therefore, methodological naturalism is false. [4, 5]

It should be noted that this argument is very similar to Nagel's argument, which we discussed in section 5.2.3. Again, the difference is that Nagel's argument is about knowledge of phenomenal character, and this argument is about knowledge of experience. But the general points of these arguments are nevertheless very similar.

The argument is clearly valid. However, there is an objection against this argument that we should consider, which runs as follows. It seems, from the argument, that it is the *knowledge* that is not intersubjectively available, not the experience. There is an easy reply to this objection, which is this. To talk about 'knowledge' is to talk about things that are known or, in other words, about what is known. We can, for example, share knowledge, meaning that there are propositions that we both know. So, even though it might seem as though, by talking about knowledge of experiences, we are talking about something other than the experiences themselves, if the knowledge of propositions about experience is not intersubjectively available, then these propositions are not

intersubjectively available. This is a problem because, if these propositions cannot be verified by the ideal scientist, then they cannot be part of a scientific theory. And if there cannot be a scientific theory about something, then this 'thing' does not exist.

## 5.5 (S<sub>5</sub>): DUALIST ARGUMENT: PERSONS

This section addresses our final definition of the subjectivity of experience:

(S<sub>5</sub>) E is subjective=df. There is some subject S which has E.

As we have seen, experience is always had by a subject, i.e. experiences are always someone's experiences. If this definition is true, as we have found it to be, this leads us to infer that in fact there are such things as subjects. Subjects include not just human beings, but also bats, Martians and possibly others who can have experiences. I am here mainly interested in the human subjects of experience, i.e. in persons. If we think that human beings have experiences, then human beings are 'subjects' and some of these subjects are persons. Is the fact that there are persons incompatible with methodological naturalism as we have defined it?

The answer to this question obviously depends on what we take a person to be. If persons are intersubjectively available, then their existence might not be incompatible with methodological naturalism. However, if persons turn out not to be intersubjectively available, then their existence could very well prove to be incompatible with methodological naturalism. So, the crucial question is, are persons intersubjectively available? This is a matter of great dispute, which depends first and foremost on one's view on persons. However, before we can talk about the ontology of persons, we first need some basic terminological clarification of what I mean when I say 'person'. I will here assume that a person is that which each of us refers to by using the personal pronoun 'I'. Now, is the referent of the personal pronoun 'I' intersubjectively available?

There are two main positions one can take with respect to the metaphysics of persons.<sup>32</sup> First, one can take the position that a human person is a material

<sup>32</sup> A third position is nihilism, the view that there are no such things as persons. The reason why we are not considering this is obvious: the truth of this position is incompatible with there being things that are subjective in the sense of (S<sub>5</sub>), while we have argued in Chapter 1

object<sup>33</sup> such as a body<sup>34</sup>, or a part of a body, such as a brain.<sup>35</sup> Second, one can take the position that a human person is an immaterial substance or a soul.<sup>36</sup> If persons are material objects, then it should be obvious that persons are indeed intersubjectively available. Medium-sized material objects like human bodies are the paradigm examples of objects that are intersubjectively available. Also the brain and neurological activity is intersubjectively available, namely by the use of brain scans, brain imagery, etc.

If persons are souls, or immaterial substances, then it is harder to say whether or not they are intersubjectively available. One might think that they obviously aren't, on the basis that nothing immaterial can be intersubjectively available, until one considers the fact that there are a number of immaterial entities which are plausibly intersubjectively available, such as properties, universals, numbers points in space, events, etc. If these are intersubjectively available, then why would immaterial souls not be? One might point out that immaterial souls, though like these other entities in so far as they are immaterial, are importantly unlike them in many other ways; human persons are not abstract like numbers and universals (if there are such things), and they are certainly vastly different from points in space or events. Thus, it seems that we cannot obviously conclude from the fact that there are some immaterial objects that are intersubjectively available, that human beings, if they are immaterial, are also intersubjectively available. It should be noted, however, that we also cannot conclude that human beings, if they are immaterial, are not intersubjectively available. It seems to me that, given that there are some immaterial objects that are plausibly intersubjectively available, we cannot say either way whether or not human beings, if they are immaterial souls, are intersubjectively available.

What does this mean for our question whether or not the subjective-making property (S<sub>5</sub>) is compatible with methodological naturalism? The conclusion we should draw regarding (S<sub>5</sub>) is then a provisional conclusion. It

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that there are such things. Of course there are many other views about persons as well, which can for example be found in Van Inwagen and Zimmerman (2007), but I cannot go into all of these here.

<sup>33</sup> One might think that using the word 'material' in this section somehow begs the question, if 'material' like naturalism is defined in terms of being intersubjectively available. However, it does not have to be the case that this is how we define 'material'. Even a naturalist in our sense could define 'material' in some other sense such as 'being extended in space' or 'having causal powers'.

<sup>34</sup> For example see Van Inwagen.

<sup>35</sup> For example see Papineau and Armstrong.

<sup>36</sup> For example see Swinburne, Robinson and Plantinga.

depends on one's stance on the ontology of persons whether the existence of persons is compatible with methodological naturalism or not. If one thinks that persons are identical to material objects, then there is no incompatibility here. If one thinks that persons are identical to immaterial objects, then it is not so clear whether or not there is an incompatibility. Since I cannot go into the debate about the ontology of persons more, we can here not conclude whether (S5) is compatible with methodological naturalism or not.

## 5.6 OBJECTIONS & REPLIES

There are a number of objections against these arguments against methodological naturalism, as well as objections against the claim that naturalism and the subjectivity of experience are incompatible. In this section, I will extensively discuss two such objections. I will set out by discussing Lycan's arguments for the claim that the subjectivity of experience is not incompatible with methodological naturalism. Secondly, I will discuss the identity theory, which is in itself an objection against the claim that the subjectivity of experience is incompatible with methodological naturalism.

### 5.6.1 Objection I: Lycan

In *Consciousness and Experience*, Lycan extensively discusses subjectivity (he calls it 'the subjectivity of the mental') and its relation to materialism.<sup>37</sup>

In this chapter I will focus specifically on the claim that the mental is *essentially* subjective, and for this reason cannot in fact or in principle be described in 'objective' terms.<sup>38</sup>

Lycan acknowledges that the relation between subjectivity and materialism is sometimes thought of as problematic. He describes the observed problem as follows:

Purely scientific terms are 'objective', thus since human beings notoriously have mental attributes, materialism is false. In particular, it is often said that no materialistically acceptable third-person scientific description of a conscious human subject can capture the fact of 'what it is like' for the subject to be in a mental state of such and

<sup>37</sup> Lycan's interpretation of 'materialism' might be different than our interpretation of methodological naturalism, but this has no bearing on the relevance of his objections.

<sup>38</sup> Lycan 1996: 45.

such a sort. This fact, an intrinsically subjective or perspectival fact, can be known only to the subject who is in the state and to beings sufficiently similar to the subject to be able to appreciate the subject's first-person reports of what being in the state is like. Certainly nothing in physics, neurophysiology, psychology, or any other science as currently conceived can answer the question of what it is like for a bat to be having the sonar sensation (if any) associated with its vaunted echolocation technique.<sup>39</sup>

Lycan thus addresses the exact topic that we are here concerned with and he thinks that there is no problem here for the materialist, which gives us a reason to discuss Lycan's reply in detail. Lycan thinks that there is no problem for the materialist for the reason that there are three 'fallacies' in thinking that subjectivity is a problem for materialism, and, in addition, there is a fourth issue which he calls 'the banana peel'. In the following, I will discuss these four objections one by one and offer replies to them.

One point that needs to be made right away is that the fallacies that Lycan points out are not fallacies of any one argument that he is replying to in particular. Lycan mentions the arguments from Nagel, Jackson and Gunderson, which he regards as different versions of the same argument and calls most of these arguments 'non-starters' – a claim which he does not back up in any way. Despite the fact that he thinks these arguments are non-starters, he nevertheless feels the need to reply to them, since there is a feeling that subjectivity is a problem for materialism:

But there remains a feeling that 'subjectivity' is an obstacle to materialism. And – I wish to admit – there remains a genuine obligation on the materialist's part to give some account of the subjectivity or perspectivalness or point-of-view aspect of the mental.<sup>40</sup>

In discussing each fallacy, I will reconstruct an argument against materialism, which I think is the argument in which Lycan observes a fallacy. Since he does not give these arguments, it remains my interpretation what the fallacies are and in which reasoning these fallacies are committed.

Let's set out by discussing the first fallacy. Take two cases (i) and (ii): in case (i) a subject, Jill, is having an experience, for example, she smells a flower. In case (ii) an observer, Jack, is observing the subject, Jill, who is having that particular mental state. Jack is either observing Jill or Jill's brain (activity). Now, there is a difference between cases (i) and (ii): Jill's experience is vastly different from the experience that Jack has of observing the subject. That is:

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<sup>39</sup> Ibid.

<sup>40</sup> Ibid.: 46.

Jack does not have the same experience as Jill does in virtue of observing Jill's brain (activity). In Lycan's words:

A human being, looking at an empty but deeply cyan-colored display on a Super VGA monitor has an intense visual sensation, but a neurophysiologist monitoring that subject's brain from a good safe distance has nothing of the sort.<sup>41</sup>

After having established that the subject and the observer have vastly different experiences, Lycan turns to 'the fallacy' right away. Without much argumentation or explanation he writes:

I hope the fallacy is plain. No materialist theory of the mind has ever entailed that watching the grey cheesy brain of someone who is having an intense cyan (or whatever) sensation is qualitatively or in any other way like having that sensation oneself.<sup>42</sup>

Since this moves a little fast, a little reconstruction is called for. Lycan seems to think that there is an argument against the materialist, which is based on the fact that the observations from a subject and from an observer of the subject are vastly different. Within that argument, he thinks that there is a fallacy. How is the argument against materialism, based on this observation, supposed to run? Again, Lycan does not say so explicitly, but I think we can reconstruct the argument as follows:

#### Argument against Materialism I

1. If materialism is true, then experiences of a subject and of an observer of the subject should be the same.
2. The experiences of the subject and the observer of the subject are not the same.
3. Therefore, materialism is false.

Lycan believes premise 2 is true, but he does not believe the first premise, nor does he believe the conclusion. The reason why Lycan rejects the first premise is, I think, because he thinks that it is a fallacy. Now, it is not very clear what the fallacy is, but this is what I think it is.

Take a case where Jill looks at a red flower and Jack looks at Jill's brain. Jill's visual experience is of an, say, intense and beautiful color red. However, Jack's experience is not of an intense red, but rather of dull grayish, the color of Jill's

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<sup>41</sup> Ibid.: 47.

<sup>42</sup> Ibid.: 48.

brain. And this is how it should be. After all, the objects of the experiences of Jill and Jack are very different: the object of Jill's experience is a red flower, hence the red experience, while the object of Jack's experience is a grayish brain. For anyone to think otherwise is to commit the fallacy of thinking that a mental state has the same properties as the object of that mental state, i.e. the fallacy of thinking that Jill's experience of a red flower actually would look red to an observer of Jill's brain, Jack. The object of Jack's experience is not the flower, nor is Jill's mental state identical to the object of Jill's mental state. Now the fallacy *is* plain: the subject's brain is not a red flower and so does not look that way to an observer of the subject's brain.

If this is Lycan's objection (which I cannot be sure about since he does not explain it in detail), I have a short reply to it, viz. that I don't commit this fallacy in any of my arguments, and none of my arguments rely on premise 1. As far as I can tell, Nagel and Jackson's arguments also do not rely on premise 1. Lycan's first objection is therefore not a problem for any of my arguments; neither is it for theirs.

Let's turn to discussing the second fallacy. Here Lycan considers a different meaning for the term 'subjectivity', viz.:

In calling mental items subjective, one might mean that they are known or presented to their owners in a way that they cannot be known to second and other parties.<sup>43</sup>

This interpretation of subjectivity is more relevant to our argument, since this is one of the senses in which we found experience to be subjective. Lycan thinks that the above statement is true; however, he claims that the materialist would never deny this:

We do not, in nature, have scanners that directly access the brains of others. But this fact too poses no threat to materialism, since no version of materialism entails or suggests that individual organisms do have scanners that directly scan the internal operations of other organisms.<sup>44</sup>

Let's reconstruct the argument against the materialist, based on the above claim, which is supposed to contain the second fallacy. Lycan does not spell out that he is objecting against this particular argument explicitly, but from what he does say I can only infer that this is in fact the argument in which he recognizes a fallacy.

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<sup>43</sup> Ibid.

<sup>44</sup> Ibid.: 49.



## Argument against Materialism II

1. If materialism is true, then an experience should be known or presented in the same way to their owners as it is to second and other parties.
2. An experience is not known or presented in the same way to their owners as it is to second and other parties.
3. Therefore, materialism is false.

According to Lycan, the second premise is true, but the first and third premises are false. The fallacy should then consist in the first premise. There are two things that need to be said with respect to the first premise. First, this premise is only true on some interpretations of materialism. For example, if one interprets materialism as ‘causal materialism’ (see Chapter 3), then there is no reason to think that this entails that experiences should be known or presented in the same way to their owners as it is to second and other parties. However, if one interprets materialism as methodological naturalism as I have done, then it does have that entailment and premise 1 is true. It thus depends on one’s interpretation of materialism whether or not premise 1 is true.

Second, on my interpretation of materialism, premise 1 is true, so how should I respond to Lycan’s objection that this is a fallacy? I think what should be said is this. I have given an argument for why I think that premise 1 is true and I have given an argument for why I think that this is a problem for naturalism – an argument much more complex than the argument above. For Lycan to deny that premise 1 is true and to deny that it is a problem for materialism is just to beg the question. Of course, Lycan could be right and I could be wrong, but Lycan does not give any arguments to support his position, nor does he give any arguments against the kind of argument that I have presented. All Lycan does is saying that he disagrees, which is his good right, but, again, as such merely begs the question.

Let’s turn to the third fallacy that Lycan observes. Lycan starts out by mentioning the knowledge argument, and then goes on to say that the knowledge argument suggests that there are ‘subjective facts’. According to Lycan, the existence of subjective facts is then used in an argument against materialism:

The knowledge argument tempts one to think that there is a special kind of fact, an intrinsically subjective or perspectival fact of ‘what it is like’, that eludes physical science and ‘objective’ science of any other sort. After all, one can know all the scientific facts about *Aplysia californica*, about bats, about human beings, about the Big

Bang, about anything you like, without knowing what it is like to have any particular sensation whatever. So there is a fact left over that is inaccessible to the third-person perspective.<sup>45</sup>

The argument against materialism that we can reconstruct based on the idea that there are subjective facts runs as follows.

### Argument against Materialism III

1. If materialism is true, then there are no facts that are inaccessible to the third person perspective.
2. There are facts that are inaccessible to the third-person perspective.
3. Materialism is false.

This time it seems that Lycan does not think that the first premise is the fallacy, but he seems to think that the second premise is 'a fallacy', or let's say, he seems to think that the second premise is false. Thus, Lycan thinks that all facts are accessible to the third-person perspective.

Lycan explains that it might seem to be the case that there are subjective facts, but that in reality these are identical to objective facts, even if we sometimes know the one fact (say the 'objective fact') without knowing the correlative other fact (say the 'subjective fact'). That is to say, there really only is one fact there, which can be known in different ways or under different descriptions. In Lycan's words:

The fact of its being like such and such for the bat to have its sonar sensation can be one and the same as the fact of the bat's being in a particular neurophysiological condition, even if the chiropterologist can know the latter without knowing the former.<sup>46</sup>

According to Lycan, the fact that we can know A without knowing B, even though  $A=B$ , has to do with knowledge being 'finicky' and 'hyperintensional', and does not imply that A is not identical to B.

How should we respond to the supposed 'fallacy' philosophers make in thinking that there are subjective facts? First of all, I'm not sure if Lycan's denial of subjective facts is a good argument against the knowledge argument. I will try to sketch why not. According to Lycan there are no subjective facts. The subjective facts that we might think we know are not subjective facts,

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<sup>45</sup> Ibid.

<sup>46</sup> Ibid.: 49-50.

but they are in fact identical to objective facts. If there are only objective facts, then it is possible for me to know all the objective facts about material objects, the workings of the eye and brains and colors, just like the famous Mary does. Yet when Mary sees a red flower for the first time, she learns a new fact, viz. 'this is what it is like to see a red flower'. If there is a fact to the matter of what it is like to see a red flower, then this is it. However, if there are no subjective facts; there are only objective facts that Mary already knows. So how do you explain that she learned anything new if this is neither an objective nor a subjective fact? Obviously one can deny that she learns anything new at all, but Lycan does not seem to be saying that. I guess he would say that she comes to know the same (objective) fact, but in a different way. However, it seems that not only her learning process is different, but also the information that she possesses upon having seen the red flower is different. One could argue she merely has gained knowledge of acquaintance and no propositional knowledge, or that she merely gained certain skills, or a phenomenal concept, or any of the options that we discussed in section 5.2.2. In any case, whether the denial of subjective facts simply solves the problem that the knowledge argument raises is not clear.

Second, I doubt that Jackson's argument relies on the existence of subjective facts. Granted, the knowledge argument turns on the fact that there is something new Mary learns when she sees a red flower for the first time. However, it does not necessarily need to be a 'subjective fact' that she learns of (or about).

Let's turn to the fourth issue, which Lycan does not call a 'fallacy', but an 'issue' and since the title of the section is Banana Peel, I will refer to this issue as the 'banana peel'. What is the banana peel?

The banana peel is an issue that Lycan has with Nagel's writing in particular. In his writing about experiences, Nagel sometimes uses 'act-object jargon'; this is Lycan's way of saying that Nagel sometimes talks as if experiences are objects. Here are Lycan's own words about Nagel:

In speaking of experiences as things that present appearances to us and toward which we take viewpoints, he makes them into objects of consciousness, as if we encountered them from time to time.<sup>47</sup>

Lycan has three issues with this kind of talk that he thinks Nagel uses. The first is that Nagel would beg the question with this kind of talk:

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<sup>47</sup> Ibid.: 51.

Nagel's act-object formulation begs the question against the materialist, or would beg the question if incorporated into the premises of an antimaterialist argument. For no materialist I know of has ever granted the existence of purely mental objects scanned by a third eye of the mind.<sup>48</sup>

If Nagel would talk about experiences as if they were 'purely mental objects' and if he would use that talk in an argument against the materialist, this argument would beg the question, since the materialist does not believe in purely mental objects.

The second issue with this kind of talk follows from the first. If one would want to argue against the materialist by saying that there are 'purely mental objects', then no further argument against materialism is needed. That is: if one wants to maintain that there are such objects, then one does not need to introduce subjectivity, since the mere existence of these objects is already an argument against the materialist.

The third issue with this kind of act-object talk is that 'it misrepresents the locus of subjectivity'. This issue is also related to the first (and second). According to Lycan the way Nagel talks about experiences is misleading:

Nagel talks of being appeared to by, and taking viewpoints toward, our experiences. But if 'experiences' are not after all objects, phenomenal individuals, they are adversely qualified or taxonomized events.<sup>49</sup>

Now, the crucial difference between Lycan and Nagel is that on Nagel's understanding a third person cannot represent someone else's first person point of view. However, on Lycan's view, someone's viewpoint-taking can be accurately represented by a third person:

Of course, we represent the external world in any number of ways, and any such representation is a representation from a point of view; this point-of-view aspect remains to be accounted for. But it hardly follows that an event of representing of viewpoint-taking on someone's part cannot itself be represented by someone else in a third-person, scientific way.<sup>50</sup>

This issue, just like the second, goes back to the first, i.e. Nagel's talk of experiences as if they were objects.

In reply to the banana peel objection, I don't want to speak for Nagel, but I do want to address this objection as an objection against my own project.

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<sup>48</sup> Ibid.

<sup>49</sup> Ibid.: 53.

<sup>50</sup> Ibid.

Since I do not rely on the premise that experiences are purely mental objects, this objection is not an objection against any of my arguments.

Concluding, I think we can say about Lycan's objections that some objections are not explained very clearly, some seem to beg the question, and some object to premises that I do not rely on in my arguments.

### 5.6.2 Objection II: Identity Theory of Mind

One obvious objection against the idea that experiences are not intersubjectively available is to hold that experiences are identical to brain states, which is one of the premises of the theory called the 'identity theory of mind'. Generally, the identity theory of mind can be formulated as follows:

The identity theory of mind holds that states and processes of the mind are identical to states and processes of the brain. Strictly speaking, it need not hold that the mind is identical to the brain.<sup>51</sup>

There are at least two versions of the identity theory of mind: the type-type identity theory and token-token identity theory. According to the type-type identity theory of mind, a type of mental state is identical to type of brain state. According to the token-token identity theory of mind, a token mental state is identical to a token brain state.

Now, if token experiences and token brain states are identical, then token experiences are intersubjectively available just as token brain states are. This means that whether or not experiences are intersubjectively available depends on whether you think there is a difference between the cases where (i) a subject Jill has an experience with phenomenal character and knows about this by introspection and (ii) a scientist Jack observes a brain scan of the subject, Jill, and knows about the experience and its phenomenal character by studying and measuring brain activity. Why does it matter whether or not you think there is a difference between case (i) and case (ii)? I will get to this question after cases (i) and (ii) are clarified and qualified first.

Case (i) is a case situated in daily life, wherein a person (the subject), Jill, has an experience with phenomenal character. For example, Jill smells a flower. 'Smelling the flower' is the experience and what it is like for Jill to smell the flower, for example, 'the flower smells sweet', is the phenomenal character (or qualia) of the experience. Jill knows by introspection that the flower smells

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<sup>51</sup> Smart 2008.

sweet. She is aware of the experience she has and just by reflecting on it she can tell that the flower smells sweet. Case (ii) is of a different nature.

Case (ii) is a case situated in a lab, in which a neuroscientist, Jack, observes the brain scan of a subject who is having a particular experience. Let's take the case of Jill smelling a flower again, so that we can compare them easily. In case (ii) Jack studies the brain scan of Jill, who smells the flower. For the sake of the argument, let's assume that neuroscientists have been able to establish which region of the brain shows activity when a subject has an experience with a particular (say, sweet) smell. In this case, Jack will be able to tell from studying Jill's brain scan that Jill smells a flower, which smells sweet to her.<sup>52</sup>

Obviously, there are many differences between cases (i) and (ii), but what is of crucial importance here is the question whether there is an important difference in the knowledge of the experience between Jill in case (i) and Jack in case (ii). In other words, is there a difference in knowledge of the experience between a subject who has the experience and an observer who merely observes the experience of a subject by means of studying a brain state?

What do I mean by 'difference in knowledge'? There are a few ways in which knowledge in these cases can differ. First, the subject and the observer could have the same or a different *kind* of knowledge (i.e. propositional knowledge, knowledge by acquaintance, know-how) of the experience. Second, they could have the same or a different *extent* of knowledge about the experience, i.e. the one could have information about the experience that the other does not have, e.g. in virtue of their different ways of observing the experience, by introspection and observation of a scan respectively.

The question whether there is a difference in knowledge between a subject having an experience and an observer observing a brain state which is not his own and by means other than introspection, is the crucial question in the qualia debate. We have already discussed the qualia debate, but I will here address this crucial question again briefly. Is there a difference in knowledge of experience between a subject having the experience and an observer observing the subject having these experiences? And, more specifically, is there anything that the subject can know that the observer per definition cannot know? Is there something we learn from having a particular experience as opposed to knowing the physical facts about the experience?

<sup>52</sup> Needless to say, this hypothetical case would require some neuroscientific progress for it to ever be actual. However, it seems reasonable to assume that these kinds of things are in principle possible. Maybe this is easier to see for a case in which a subject is in pain and a scientist can see activity in a certain region in the brain on a brain scan.

If one thinks that there is no difference in knowledge between cases (i) and (ii), then one is most likely an identity-theorist. After all, if you think that an observer studying a brain scan can know the same information about the experience as the subject in question who is having the experience, then it must be the case that experiences (or: mental states) are identical to brain states. If this would *not* be the case, then the observer and the subject would not be observing the same ‘thing’, in which case they could not know the same information. If you are an identity theorist, then experience is thereby intersubjectively available. After all, not only the person who is having the experience (the subject), but also observers of this subject’s brain scan have access to the experience. The subject as well as the observer has access to, and adequate knowledge of, the experience in question. Given that ‘intersubjectively available’ means that more than one person should be able to access something, in this case, experience is intersubjectively available. But for experience to be intersubjectively available in this way, the identity theory needs to be true. But is the identity theory true?

Both the type-type and token-token identity theory are very problematic. According to the token-token identity theory a particular mental state (of a particular person) is identical to a particular brain state (at a particular time). The problem with the token-token identity theory is that it is hard to specify and give evidence in its favor, since each particular mental state of each particular person at any particular time might correspond to a unique brain state. This means that the theory cannot be tested or verified, since we might never even have the same brain state twice. Of course this does not mean that the token-token identity theory is false, but there is also no reason to think that it is true. What about the type-type identity theory?

According to the type-type identity theory, types of mental states are identical to types of brain states. So my particular token experience of pain is not identical to a particular token brain state, but the type experience of pain is identical to a type of brain state. The problem with the type-type identity theory is that it rules out that a particular mental state could be realized by different brain states, which is rather implausible. That would mean, for example, that only humans could experience a particular mental state (such as pain), and a Martian with a silicon brain could not have that same mental state. There are many other objections against the type-type identity theory as well, but I will confine myself to discussing one famous one, namely Kripke’s.

In order to explain Kripke’s objection to the type-type identity theory, we only need to imagine a particular type of brain state and the particular type of mental state to which it is supposed to be identical. If this brain state and this mental state are in fact identical, they are so necessarily. The necessity

of identity is commonly accepted in analytic philosophy, as Perry puts it: 'If A and B are in fact one thing, there is no possible world in which they are two things.'<sup>53</sup> Now Kripke points out that, in the case of brain states and mental states, their identity *seems* to be contingent. According to Kripke, the physicalist admits that the relation between brain states and mental states *seems* to be contingent but holds that this is merely an apparent contingency, just as the identity of many other phenomena seems to be contingent, such as the identity of molecular motion and heat. However, Kripke argues that there is a disanalogy between the apparent contingencies of the identities of molecular motion and heat on the one hand and brain states and mental states on the other hand. How are these cases disanalogous?

Whereas the contingency of the identity of molecular motion and heat can be explained, no such explanation is possible in the case of the contingency of the identity of brain states and mental states. How can the contingency in case of molecular motion and heat be explained? Kripke proffers the following explanation:

In the case of the apparent possibility that molecular motion might have existed in the absence of heat, what seemed really possible is that molecular motion should have existed without being felt as heat, that is, it might have existed without producing the sensation S, the sensation of heat.<sup>54</sup>

In the case of molecular motion and heat, there is thus an 'intermediary between the external phenomenon and the observer', namely the sensation of heat. Molecular motion merely produces heat. But if this is the case, then the analogy with the apparent contingent identity of brain states and mental states breaks down, since brain states do not produce mental states and there is no intermediary available. Kripke uses the example of pain to show how the analogy breaks down:

In the appropriate sentient beings is it analogously possible that a stimulation of the C-fibers should have existed without being felt as pain? If this is possible, then the stimulation of C-fibers can itself exist without pain, since for it to exist without being felt as pain is for it to exist without there being any pain. Such a situation would be in flat out contradiction with the supposed necessary identity of pain and the corresponding physical state, and the analogue holds for any physical state which might be identified with a corresponding mental state.<sup>55</sup>

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<sup>53</sup> Perry 2001: 17.

<sup>54</sup> Kripke 1972: 151.

<sup>55</sup> Ibid.



So, the contingency of the relation between the molecular motion and heat might be able to be explained, but in the case of pain no such explanation is possible. Why not? Because in the case of molecular motion and heat we pick out 'molecular motion' by one of its accidental properties 'heat', but we do not pick out pain by one of its accidental properties: we pick it out by the property of pain itself. Here is a longer passage where Kripke makes this exact point:

In the case of the identity of heat with molecular motion the important consideration was that although 'heat' is a rigid designator, the reference of that designator was determined by an accidental property of the referent, namely the property of producing in us the sensation S. It is thus possible that a phenomenon should have been rigidly designated in the same way as a phenomenon of heat, with its reference also picked out by means of the sensation S, without that phenomenon being heat and therefore without molecular motion. Pain, on the other hand, is not picked out by one of its accidental properties; rather it is picked out by the property of pain itself, by its immediate phenomenological quality. Thus pain, unlike heat, is not only rigidly designated by 'pain' but the reference of the designator is determined by an essential property of the referent. Thus it is not possible to say that although pain is necessarily identical with a certain physical state, a certain phenomenon can be picked out in the same way we pick out pain without being correlated with that physical state. If any phenomenon is picked out in exactly the same way that we pick out pain, then that phenomenon is pain.<sup>56</sup>

This means that there is a disanalogy between the relation between molecular motion and heat on the one hand and the relation between brain states and mental states on the other:

The apparent contingency of the connection between the mental state and the corresponding brain state thus cannot be explained by some sort of qualitative analogue as in the case of heat.<sup>57</sup>

And that, in turn, means that there is no explanation for the apparent contingency of the identity of brain states with mental states, except of course that the identity is *de facto* contingent. But, as we said at the beginning of our discussion, there is no contingent identity. Therefore, brain states are not identical to mental states.

In sum, we can say that both versions of the identity theory are thus very problematic. The naturalist could still choose to adhere to a version of the identity theory, but this way out would come at a very high price.

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<sup>56</sup> Ibid.: 152-3.

<sup>57</sup> Ibid.: 152.

## 5.7 ALTERNATIVE APPROACHES

In this chapter, we have established that there is an incompatibility between subjective experience and methodological naturalism. This poses a dilemma: should one reject the existence of subjective experience altogether in order to comfortably remain or become a methodological naturalist, or should one believe in the existence of subjective experience and adopt an alternative metaphysics such as dualism? Maybe there are options that are less extreme. In this section I will discuss three such ‘less extreme alternative approaches’ proffered by philosophers who have explicitly addressed the incompatibility between the subjectivity of experience and methodological naturalism. I will discuss these alternative approaches and see if they address the arguments we have given and, if so, if these alternatives are genuine options for the naturalist.

The first alternative approach urges us to consider an alternative interpretation of the term ‘objectivity’, since the standard interpretation might partly constitute the incompatibility that we have observed. This alternative interpretation of ‘objectivity’ is proffered by Chrisley. The second alternative approach is similar: Velmans also proffers to redefine the term ‘objectivity’ as a form of ‘intersubjectivity’. Velmans’ idea is similar to Chrisley, yet not the same. The third alternative approach that I will discuss is the theory of ‘subjective physicalism’, offered by Howell, which presents a form of physicalism that grants that an objective understanding of reality cannot be complete.

### 5.7.1 Chrisley: Objectivity as Intersubjectivity

In “A View From Anywhere: Prospects for an Objective Understanding of Consciousness” Chrisley addresses the exact question that Nagel and Georgalis are concerned with, which we discussed in section 5.2, viz.:

Can there be an objective understanding of subjectivity itself? In particular, can there be an objective understanding of conscious experience? Or does the essentially perspectival, subjective nature of experience prevent its full inclusion in a truly objective, non-perspectival world view?<sup>58</sup>

As we have seen, Nagel’s answer to the first two questions is ‘no’. Chrisley thinks that Nagel’s answer to these questions is not an unqualified ‘no’, but rather an: ‘It depends. It depends on what kind of objective understanding is in question.’<sup>59</sup> Georgalis’ answer is very similar to Nagel’s: it is ‘no’ iff the term

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<sup>58</sup> Chrisley 1998.

<sup>59</sup> Ibid.: 1.

‘objectivity’ is interpreted in a particular way (the way we have interpreted it), which Georgalis calls ‘on a narrow construal of ‘objective’, one that constrains it to what is obtainable by strictly third-person methodologies.’ Now, this interpretation of ‘objective’ and ‘objectivity’ is exactly the place where Chrisley jumps into the discussion. How?

Chrisley thinks that the problem that Nagel and Georgalis see with providing an objective understanding of subjectivity is due to their interpretation of ‘objectivity’. Here is what Chrisley proffers to do:

I would like to defend the possibility of an objective understanding of consciousness, in all its subjective glory. The problems that Nagel encounters stem, I believe, from his “view from nowhere” conception of objectivity. I will argue that this conception of objectivity is problematic, and will therefore employ a different notion of objectivity (...).<sup>60</sup>

To be more specific, Chrisley thinks that the problem with a ‘view from nowhere’ conception of objectivity is that it ‘takes objectivity to be a particular kind of view’.<sup>61</sup> Chrisley contends that all views are from *somewhere*, which constrains the relevant notion of objectivity. The question whether there can be an objective understanding of subjectivity should be reformulated as: ‘Can there be an understanding of consciousness, which is as objective as physics is about the physical world?’<sup>62</sup> If there is some limit to the objectivity of physics then a similar limit to the objectivity of consciousness should not be held as an argument against that objectivity. Now, what kind of interpretation of objectivity does Chrisley proffer as a substitute for Nagel’s interpretation?

I am proposing that objectivity is not a view from nowhere. On the other hand, objectivity does involve views of the world. So perhaps objectivity is not itself a particular view, but a virtuous way of negotiating perspectival subjective views.<sup>63</sup>

After Smith, Chrisley calls this interpretation of objectivity ‘objectivity as perspective coordination’ or ‘a view from anywhere’.<sup>64</sup> Negotiating perspectival

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<sup>60</sup> Ibid.: 4.

<sup>61</sup> Ibid.

<sup>62</sup> Ibid.

<sup>63</sup> Ibid.: 5.

<sup>64</sup> Chrisley 1998: 5. Even though Chrisley’s account of objectivity is inspired by Smith’s I am here not going into Smith’s account further. Smith’s account of objectivity is based on his ‘constructivist, participatory’ metaphysics, which is very different from the kind of metaphysics we assume in this project. For the sake of completeness here is Chrisley’s description of Smith’s account of objectivity: ‘Smith’s idea is that the fundamental nature

subjective views and coordinating them should be understood as equivalent actions here. Since on Chrisley's account objectivity is the coordination of different perspectives from different points of view, this kind of objectivity does not only allow for subjectivity, it requires subjectivity. After all, the 'objective view' is a coordination or negotiation of all the subjective views together. Since Chrisley's concept of 'objectivity' requires subjective views and is a coordination of these subjective views, we can safely say that his concept of objectivity is better understood as 'intersubjectivity'.

Now, we need to ask two questions. First, is Chrisley's alternative account of 'objectivity' relevant for our arguments? And second, could the methodological naturalist accept it?

Chrisley's alternative account of 'objectivity' seems to be relevant for Nagel's argument against physicalism. To recall, according to Nagel, physicalism is an objectivist theory that necessarily leaves any points of views out of account. If physicalism would be an intersubjective theory instead of an objectivist one (in Chrisley's terms), then, as such, it would not be incompatible with methodological naturalism. However, to reinterpret objectivity as intersubjectivity does not make a difference for the other arguments against methodological naturalism that we have formulated, or in any case, it is not clear that it does. The naturalist will still hold that those things exist that the ideal scientist tells us that exist and this means that propositions need to be verifiable. This, in turn, means that the propositions cannot be about things that are not intersubjectively available. To redefine the term objectivity is thus not going to make a difference regarding the incompatibility of the subjectivity of experience and methodological naturalism.

### 5.7.2 Velmans: Objectivity as Intersubjectivity

Chrisley is not the only one who proffers to redefine objectivity as 'intersubjectivity'. Velmans proposes to redefine 'objectivity' in a similar fashion. He does so as part of his 'reflexive monism' within which 'the external phenomenal world is viewed as part-of consciousness, rather than apart from it'.<sup>65</sup> The motivation for this reflexive model of perception and the relation between consciousness and the physical world stems from exactly the problem we have been studying: the incompatibility between subjective experience and methodological naturalism. This is how Velmans describes his motivation:

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of objectivity is the creation, stabilization, and maintenance of objects in the face of the underlying non-objectual nature of reality.' Chrisley 1998: 5-6.

<sup>65</sup> Velmans 1993: 81.

Classical ways of viewing the relation of consciousness to the brain and physical world make it difficult to see how consciousness can be a subject of scientific study. In contrast to physical events, it seems to be private, subjective, and viewable only from a subject's first person perspective. But much of psychology does investigate human experience, which suggests that the classical ways of viewing these relations must be wrong.<sup>66</sup>

This is why Velmans comes up with a new model, the reflexive model, which is part of a sort of neutral monism that he defends.<sup>67</sup> I will here not discuss Velmans' whole view but I will focus on the interpretation of the concept of objectivity that he develops as part of it.

Before we can get to this revised concept of objectivity, however, we need to know about one important part of his theory of reflexive monism. According to this theory, material objects are not 'publicly accessible' at all, as is always assumed. The whole physical world is 'part' of consciousness and, as such, as private as our experiences and our own mental states. Why does Velmans think that material objects are not publicly accessible? His reason is that we cannot access these material things directly but we can only access our experiences of them. Our experiences of mountains are just as private as our experiences of, for example, our headaches: they are both experiences and equally private. There are thus no publicly accessible objects, according to Velmans, which is why he thinks that the concept 'public' should be replaced by 'private experiences shared':

Further, to the extent that things are subject to similar perceptual processing in different human beings it is reasonable to assume a degree of commonality in the way such things are experienced. While each experience remains private, it may be a private experience that others share. Consequently, experienced things (phenomenal objects and events) may be 'public' in the sense of private experience shared.<sup>68</sup>

Velmans uses this idea for his interpretation of objectivity. He proffers to substitute 'objectivity' with 'intersubjectivity' in a way similar to Chrisley. What is this concept of intersubjectivity?

Once an essentially 'private' experience becomes 'public' in the sense that others have similar (private) experiences, there is also a transition from subjectivity to intersubjectivity. Each private experience is necessarily subjective in that it is always the

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<sup>66</sup> Ibid.

<sup>67</sup> Velmans calls it 'reflexive monism', not neutral monism, but I think we can say that his monism is a form of neutral monism.

<sup>68</sup> Velmans 1993.

experience of a *given* observer; once that experience is shared with another observer it becomes inter-subjective. To the extent that an experience can be *generally* shared (by a community of observers) it can form part of the data-base of a communally grounded science.<sup>69</sup>

An important difference between this concept of intersubjectivity and the ordinary concept of objectivity is that, whereas objectivity requires the absence of subjective viewpoints, intersubjectivity does not – on the contrary.

Note that the intersubjectivity in this sense does not entail an absence of subjectivity, i.e. it does not entail the existence of some observer-free ‘objectivity’ even for observations and measurements in natural science.<sup>70</sup>

According to the reflexive model, material objects and science involving these objects are thus not ‘public’, ‘objective’ and ‘repeatable’ in the sense in which they are normally understood. They are only public in the sense of ‘private experience shared’, they are intersubjective rather than objective, and they are repeatable in the sense that ‘they are sufficiently similar to be taken for ‘tokens’ of the same ‘type’’.<sup>71</sup>

The result of this alternative view of the physical world and of science makes that a ‘science of consciousness’ is perfectly in line with ordinary science. This view of objectivity, i.e. intersubjectivity, includes subjectivity rather than opposes it.

On Velmans’ account, would the subjectivity of experience still be incompatible with methodological naturalism or not? Well, it seems that they would not be incompatible because the idea of what science is and of what naturalism is would be altered to such an extent that there is no incompatibility anymore with subjective experience. This could be seen as an improvement of the current situation where one is forced to either deny that there are subjective experiences, or to claim that methodological naturalism is false. However, it comes at a price, which is accepting the reflexive monist model and the view on science and naturalism that it entails. The issue here is that it is very unlikely that the naturalist is willing to accept a science which is not public and repeatable in the sense that we have talked about, or in other words: it would be hard to find a naturalist who would still accept this *as science*. And not just this view of science would be problematic to accept for the naturalist

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<sup>69</sup> Ibid.

<sup>70</sup> Ibid.

<sup>71</sup> Ibid.

but also this view on the material world. As we have seen, Velmans thinks that material objects are also not public but identical to the experiences we have of perceiving them. The reflexive monist model is a form of neutral monism and even though it would, as such, be a solution to the incompatibility we have observed, it is unlikely that it is an acceptable solution for the naturalist.

### 5.7.3 Howell: Subjective Physicalism

A third alternative approach to the incompatibility of subjective experience and methodological naturalism is the theory of ‘subjective physicalism’. In his paper “Subjective Physicalism” Howell presents a version of physicalism that includes the thesis that everything that exists is physical, but also affirms that objective theories cannot capture all there is to capture. Howell describes subjective physicalism as:

A version of physicalism according to which all things, properties, and facts are physical, but no objective theory – including physics – can completely describe the world. In particular, some physical states are subjective, in that those states must be undergone in order to be fully grasped.<sup>72</sup>

Now, although this sounds promising, the question is what this sort of view would look like. Howell lays down two versions of the theory of subjective physicalism:

Subjective physicalism can be developed in two ways, involving either of the following claims:

1. Inclusive subjective physicalism: There are two ways of grasping some physical properties: objectively, via physical descriptions, and subjectively, via conscious experiences. There are no properties, however, that physical descriptions leave out.
2. Exclusive subjective physicalism: Some physical properties can be grasped only subjectively. The properties that underwrite conscious experience (e.g. qualia) are physical, but they are not identical with any property mentioned in a completed physics.<sup>73</sup>

Since Howell focuses on the second interpretation of subjective physicalism in his paper, so will I. How can we understand exclusive subjective physicalism

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<sup>72</sup> Howell 2008: 126.

<sup>73</sup> Ibid. Paraphrased.

better? The core idea of it is that physicalism is true. What does Howell mean by 'physicalism' here? He defines physicalism as follows:

The world is completely metaphysically grounded in the physical, in that everything supervenes on things, properties, and states that are not fundamentally intentional or phenomenal.<sup>74</sup>

But this is not all there is to the theory because, even though physicalism is true, according to it, this does not require or entail that an objective description of reality has to be complete. This is the case because, even though everything there is is physical, some states require that they are undergone in order for anyone to know what it is like to have them.

There are aspects of the world one cannot fully understand without occupying particular subjective states. This understanding, therefore, cannot be conveyed without putting someone else in that subjective state. (...) It is the necessarily experiential nature of qualitative states that makes them intractable for an objective description of the world.<sup>75</sup>

With respect to experiences and phenomenal character, the subjective physicalist would therefore hold that one cannot know the experiences (or know what it is like to have them) without having them:

What is doing the work for the subjective physicalist is actually the more basic claim that there is something that it is like to instantiate certain physical states, and that it is only by instantiating those states that one can fully grasp them.<sup>76</sup>

This means that, once again, this alternative theory is relevant for Nagel's argument against physicalism. Nagel would not have problems with subjective physicalism since he mainly wants to make the point just affirmed in the passage above and does not want to argue against physicalism in particular. Nagel wants to argue mainly that an objective understanding or, objective account of reality, cannot completely describe reality. This is exactly the point that is granted by the theory of subjective physicalism.

But again, this alternative theory is not relevant for any of the other arguments that we have formulated against methodological naturalism. Why can subjective physicalism not help the naturalist against the arguments we have raised against it? Well, the methodological naturalist thinks that all and only

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<sup>74</sup> Howell 2008: 130.

<sup>75</sup> Ibid.: 131.

<sup>76</sup> Ibid.: 132.



what science tells us is true and for any statement to be scientific it needs to be verifiable by other scientists. This means that these propositions can only quantify over things that are intersubjectively available. The issue is that the theory of subjective physicalism allows for experiences that are not intersubjectively available. This means that either subjective physicalism is incoherent or it means that methodological naturalism should be drastically redefined. If the former is the case, the methodological naturalist cannot accept subjective physicalism, for who can accept an incoherent theory? If the latter is the case, the methodological naturalist could not accept subjective physicalism because it would be too far removed from the methodological naturalist's own position. If it is necessary that the methodological naturalist gives up the idea that there cannot be things that are not intersubjectively available, then he ceases to be a methodological naturalist.

## 5.8 CONCLUSION

In this chapter, we established that the subjectivity of experience, in some senses, is incompatible with methodological naturalism as we have defined it. We have found that (S1) is in itself not incompatible with methodological naturalism, but does turn out to be so in virtue of (S2). For a while we bracketed (S2) to see if (S1) would also be a problem for methodological naturalism if (S2) was taken out of consideration, but this was merely a thought experiment: phenomenal character is essentially connected to a single point of view.

We then turned to a full discussion of (S2) in section 5.2 and we concluded that (S2) is incompatible with methodological naturalism. Using this incompatibility, we formulated an argument against methodological naturalism, which we called 'the argument from perspective'. We compared the argument from perspective to both the knowledge argument and Nagel's argument and found that these arguments are not identical, yet very similar to one another.

Next, in section 5.3, we discussed definition (S3) and concluded that (S3) is incompatible with methodological naturalism as well. Based on this incompatibility we formulated another argument against methodological naturalism: the privacy argument. This argument relies on the premise that token experience and token phenomenal character can only be had or accessed by one person, which turns out to be problematic on our interpretation of methodological naturalism. Naturally, there are objections against this kind of argument, such as, for example, the identity theory, which we later discussed extensively, in section 5.7.

In section 5.4 we concluded that definition (S4) and methodological nat-

uralism are also incompatible. Definition (S4) states that we can only have knowledge of our experiences from a first person point of view, which led us to formulate another argument against methodological naturalism, which is similar to, yet different from, the privacy argument that we considered in the previous section.

Section 5.5 concerned the last definition of subjectivity that we distinguished which is that experiences are subjective in the sense that they are always had by a subject (S5). Here, we considered whether the existence of persons is compatible with methodological naturalism. We concluded that, if one thinks persons are material objects, then they are intersubjectively available and compatible with naturalism. However, if one thinks that persons are not material objects, but e.g. immaterial souls, then it is not clear whether they are compatible with methodological naturalism. It thus depends on one's ontology of persons whether their existence, and so (S5), is compatible with methodological naturalism.

After concluding that at least three definitions of the subjectivity of experience are incompatible with methodological naturalism, in section 5.6 we discussed two objections against this conclusion. The first objection is from the hand of Lycan and consists of a number of smaller objections, which we all discussed and to which we offered replies. The second objection we discussed is the identity theory, which, if true, would deny one of the premises that functions in all of our arguments. We discussed a number of objections against the identity theory and concluded that it is not a very promising theory.

Finally, in section 5.7, we discussed three alternative approaches to the incompatibility of subjective experience and methodological naturalism. Obvious alternative approaches would be to deny that there are subjective experiences or to abandon methodological naturalism, but in this section I discussed three less extreme approaches. Two of them are attempts to redefine the concept objectivity as intersubjectivity, and the third is a theory called 'subjective physicalism'. Even though these do seem to be alternative approaches to the problem at hand, it is unlikely that the methodological naturalist could adopt them. We cannot but conclude, then, that methodological naturalism and the subjectivity of experience are incompatible.

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Now that we have come to the end of our discussion, let's take stock. The main question this dissertation aimed at answering was whether the subjectivity of experience is compatible with naturalism. After careful analysis of all the concepts involved, we have had to conclude that in fact the subjectivity of

experience and (methodological) naturalism are not compatible. Where can the naturalist go from here?

There are at least two things the naturalist could do. First, the naturalist could come up with a new version of metaphysical naturalism that we have not discussed and that does not fall prey to the objections that we have presented against the forms of metaphysical naturalism that we did discuss. It might be the case that such a form of naturalism can be thought of and, if so, it remains an open question whether that form of naturalism would be compatible with the subjectivity of experience. I am skeptical about this option, however, since metaphysicians have been working on accounts of materialism, physicalism and naturalism for a long time, which makes it seem unlikely that a totally new account is forthcoming.

Second, the naturalist could come up with an alternative to methodological naturalism, which remains close to the sympathies of the naturalist, but which is not incompatible with the subjectivity of experience. In this chapter, we considered three alternative approaches that in the end did not work, but that does not mean that there is not yet another one that does work. This seems a genuine option, though one concern is whether this alternative would still be deserving of the name 'naturalism'. However, both these options, and maybe others, can be further researched. For now, naturalism is a fascinating topic and for naturalists and non-naturalists alike it is very interesting to see how the debate about it is going to develop, whichever direction it takes.

## SUMMARY

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This dissertation concerns the question whether naturalism and the subjectivity of experience are compatible. It is often assumed, as well as argued for, that subjectivity is a problem for naturalism; it is nevertheless not clear what the phenomenon of subjectivity is, or what the thesis of naturalism exactly amounts to. I devote a large part of my dissertation to analyzing these notions before concluding that the subjectivity of experience and the version of naturalism that I have found to be tenable, methodological naturalism, are in fact incompatible.

In the first chapter, I analyze the notion 'subjectivity'. I discuss a number of definitions of the subjectivity of experience that are given in the literature, and some further definitions suggested by the discussion of those. After giving a list of five definitions of the concept 'subjectivity', I go on to argue that experience is subjective in all these senses. I also argue that self-consciousness and intentionality are subjective in the same ways.

Subjectivity is a problem for naturalism only if there are such things as experiences. In the second chapter, I address the question if there are such things. After considering arguments against it, I present a strong argument for the conclusion that there are such things as experiences. This argument is an adaptation of Van Inwagen's argument for the existence of properties which turns on Quine's criterion of ontological commitment. I continue with a discussion of eliminativism and behaviorism, which can be seen as replies to this argument. I show that behaviorism and eliminativism face many problems and ought to be rejected. It follows that we are committed to the existence of experience.

In the third chapter, I go on to clarify the concept of naturalism. I argue

that 'materialism' and 'physicalism' are versions of naturalism, which can be divided into two different kinds: 'metaphysical' and 'methodological'. There are a number of versions of metaphysical naturalism: 'classical materialism', 'spatiotemporal materialism', 'causal materialism' and 'anti-supernaturalism'. Since none of these versions of naturalism are tenable we have to reject metaphysical naturalism. The question of this dissertation then becomes if the subjectivity of experience is compatible with methodological naturalism.

In the fourth chapter, I go on to consider what methodological naturalism is. After considering a number of possible definitions, I conclude that it is best understood as the view that science tells us which things exist. Although a number of problems can be raised against this form of naturalism, none of them are fatal. Given the fact that the things that science tells us that exist are public or intersubjectively available, it follows that methodological naturalism is committed to an ontology of public and intersubjectively available entities.

Finally, armed with the analyses of these terms, the fifth chapter addresses the main question of this dissertation. I conclude that three of the five senses in which experience is subjective are incompatible with methodological naturalism as we have defined it. I then discuss objections the naturalist might have to these arguments and conclude that they fail. I also consider three alternative approaches, which could possibly avoid the problem; however, I show that the methodological naturalist could not adopt these for a number of different reasons. I conclude that naturalism and the subjectivity of experience, at least in some senses, are incompatible.

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# Naturalisme en subjectiviteit

## *Een filosofische analyse*

Er wordt vaak aangenomen, of expliciet geargumenteed, dat subjectiviteit een probleem is voor naturalisme. Het is echter niet zo duidelijk wat het fenomeen 'subjectiviteit' eigenlijk is en wat de theorie 'naturalisme' precies behelst. Mijn proefschrift tracht een bijdrage te leveren aan dit debat, dat zich afspeelt op het grensgebied van metafysica en '*philosophy of mind*', door de betreffende termen uitvoerig te analyseren alvorens de vraag te stellen of dit fenomeen en deze theorie inderdaad onverenigbaar zijn.

In het eerste hoofdstuk bespreek ik het fenomeen 'subjectiviteit'. Er wordt vaak over het mentale leven, of '*the mind*', gezegd dat het 'subjectief' is. In plaats van alle aspecten van het mentale leven te bespreken, richt ik mij in dit hoofdstuk op één aspect, namelijk 'ervaring'. De vraag die centraal staat in het eerste hoofdstuk is: wat is de subjectiviteit van ervaring? Of, in andere woorden, wat betekent het om te zeggen dat ervaring subjectief is? Ik begin mijn poging om deze term te verhelderen door te kijken naar Nagels beschrijving van de subjectiviteit van ervaring in zijn artikel "What is it like to be a Bat?" Dit artikel is een klassieker in het veld en wordt vrijwel altijd als uitgangspunt genomen bij de bespreking van subjectiviteit. Uit Nagels artikel zijn twee definities van de subjectiviteit van ervaring af te leiden: (S1) Subjectiviteit van ervaring =df. Ervaringen hebben fenomenaal karakter. En: (S2) Subjectiviteit van ervaring =df. Ervaringen zijn noodzakelijkerwijs verbonden met een bepaald perspectief. Uit de daaropvolgende discussie over hoe we volgens Nagel de term 'bepaald perspectief' moeten uitleggen, kunnen nog twee definities van subjectiviteit worden afgeleid: (S3) Subjectiviteit van ervaring =df. Ervaringen zijn privé. En: (S4) Subjectiviteit van ervaring =df. Ervaringen kunnen alleen gekend worden vanuit een eerste-persoonsperspectief.

Na deze vier definities van de subjectiviteit van ervaring te hebben onderscheiden, besteed ik aandacht aan de overige literatuur over dit onderwerp om te zien of er nog andere definities moeten worden toegevoegd aan deze inventarisatie. Er blijkt nog één andere definitie van de subjectiviteit van ervaring te zijn gegeven, namelijk: (S5) Subjectiviteit van ervaring =df. Ervaringen zijn altijd ervaringen van een subject. In de overige literatuur worden definities gegeven die identiek zijn aan, of kunnen worden gereduceerd tot, een van deze vijf definities. Het blijkt dus dat de subjectiviteit van ervaring op vijf verschillende manieren geïnterpreteerd kan worden.

In het laatste deel van het eerste hoofdstuk onderzoek ik vervolgens of ervaring ook daadwerkelijk subjectief is in deze vijf betekenissen en ik concludeer dat dat inderdaad het geval is. Ik bespreek vervolgens kort de vraag of andere aspecten van het mentale leven, zoals zelfbewustzijn, intentionaliteit en secundaire eigenschappen van objecten, subjectief zijn in dezelfde betekenissen en ik kom tot de conclusie dat in ieder geval sommige mentale fenomenen subjectief zijn in één of meerdere betekenissen van het woord.

In het tweede hoofdstuk komt de vraag aan bod of er wel zoiets is als ervaring. Immers, als er geen ervaringen zijn dan kan de 'subjectiviteit van ervaring' geen probleem zijn voor naturalisme. Ik begin dit hoofdstuk met de bespreking van een aantal argumenten tegen het bestaan van ervaring, waarna ik een argument presenteer voor het bestaan van ervaring dat gebaseerd is op de metaontologie van Quine. Volgens Quine zijn we gecommiteerd tot het bestaan van dingen waarover onze zinnen quantificeren, als we tenminste geloven dat deze zinnen waar zijn. In navolging van Van Inwagen, die deze methode heeft gebruikt om aan te tonen dat er zulke dingen zijn als universalia, laat ik zien dat deze methodologie kan worden gebruikt om aan te tonen dat er zulke dingen zijn als ervaringen. Ik sluit het hoofdstuk af met een bespreking van twee theorieën die kunnen worden opgevat als objecties tegen dit argument voor het bestaan van ervaringen: behaviorisme en eliminativisme. Aangezien deze theorieën niet houdbaar blijken te zijn, zoals ik laat zien in dit hoofdstuk, blijft het argument voor ervaring staan.

Het derde hoofdstuk markeert het begin van de analyse van de term 'naturalisme'. De eerste sectie biedt een overzicht van het gebruik van deze term aan de hand van een inventarisatie van in de literatuur gegeven definities van materialisme, fysicalisme en naturalisme. Het blijkt dat er een belangrijk onderscheid kan worden gemaakt tussen twee soorten definities: metafysische definities aan de ene kant en methodologische definities aan de andere kant. De termen 'materialisme', 'fysicalisme' en 'naturalisme' verwijzen niet per definitie naar verschillende theorieën, maar er zijn varianten van materialisme, fysicalisme en naturalisme die metafysisch van aard zijn en varianten die

methodologisch van aard zijn. Definities van materialisme die metafysisch van aard zijn verschillen niet aanzienlijk van definities van fysicalisme die metafysisch van aard zijn, maar ze verschillen wel substantieel van methodologische definities. Om deze reden laat ik de termen 'materialisme', 'fysicalisme' en 'naturalisme' vallen en spreek ik in het vervolg slechts over 'methodologisch naturalisme' en 'metafysisch naturalisme', waarbij deze termen ook de methodologische respectievelijk metafysische varianten van materialisme en fysicalisme insluiten.

In het vervolg van hoofdstuk 3 bespreek ik vier versies van metafysisch naturalisme: (i) klassiek materialisme, (ii) spatio-temporeel materialisme, (iii) causaal materialisme, en (iv) anti-supernaturalisme. Alhoewel deze theorieën elk op een bepaald moment populair zijn geweest, blijken ze, elk om verschillende redenen, onhoudbaar te zijn. Dit betekent dat metafysisch naturalisme in het algemeen niet houdbaar is en dat de vraag of het compatibel is met de subjectiviteit van ervaring niet gesteld hoeft te worden.

In hoofdstuk 4 wend ik mij vervolgens tot een bespreking van methodologisch naturalisme. Volgens methodologisch materialisme kunnen de dingen die bestaan niet worden gekarakteriseerd door een bepaalde metafysische aard (zoals het geval is bij metafysisch naturalisme), maar moet een bepaalde methodologie worden gebruikt om te bepalen uit welke elementen de ultieme realiteit is opgebouwd. De methode die hiervoor moet worden gebruikt volgens methodologisch naturalisme is de wetenschap. Dat betekent dat de wetenschap ons uiteindelijk zal vertellen welke dingen bestaan. Nadat ik heb vastgesteld wat 'methodologisch naturalisme' betekent, moet de vraag gesteld worden of het een houdbare theorie is. Zoals eerder aangetoond is metafysisch naturalisme onhoudbaar, dus om naturalisme in het algemeen serieus te kunnen nemen zal het methodologisch naturalisme beter moeten vergaan dan het metafysisch naturalisme. Ik laat zien dat methodologisch naturalisme ook een aantal problemen kent, waarvan Hempels dilemma het meest bedreigend is, maar dat geen van deze problemen fataal is. Ik sluit het hoofdstuk af met een bespreking van wetenschap, de wetenschappelijke methode en een van de karakteristieke aspecten van wetenschap in het bijzonder, namelijk 'objectiviteit'. Ik leg de objectiviteit van wetenschap uit als het idee dat wetenschappelijke stellingen verifieerbaar moeten zijn.

In het vijfde hoofdstuk wend ik mij uiteindelijk tot de vraag of de subjectiviteit van ervaring, zoals gedefinieerd in het eerste hoofdstuk, en methodologisch naturalisme, zoals beschreven in het vierde hoofdstuk, compatibel zijn. Om dit te kunnen bepalen, bespreek ik elke definitie van de subjectiviteit van ervaring afzonderlijk om vast te stellen of het in die interpretatie compatibel is met naturalisme. Voor de eerste definitie van subjectiviteit (S1) geldt dat



het afhangt van (S<sub>2</sub>) of (S<sub>1</sub>) al dan niet compatibel is met naturalisme – op zichzelf is het niet duidelijk of het feit dat ervaring fenomenaal karakter heeft, (S<sub>1</sub>), een probleem is voor naturalisme. Uit de bespreking van (S<sub>2</sub>), (S<sub>3</sub>) en (S<sub>4</sub>) blijkt dat subjectiviteit in deze interpretaties incompatibel is met naturalisme. Als ervaring noodzakelijkerwijs verbonden is met een bepaald perspectief, (S<sub>2</sub>), privé is, (S<sub>3</sub>), of alleen gekend kan worden vanuit een eerste-persoonsperspectief, (S<sub>4</sub>), dan betekent dat dat zinnen over ervaring geen wetenschappelijke stellingen kunnen zijn. Wetenschappelijke stellingen moeten immers verifieerbaar zijn en kunnen dus geen betrekking hebben op fenomenen die subjectief zijn in de betekenissen van (S<sub>2</sub>), (S<sub>3</sub>) en (S<sub>4</sub>). Aangezien de wetenschap ons alleen de waarheid en de volledige waarheid geeft, althans volgens de methodologisch naturalist, kunnen er niet zulke dingen zijn als ervaringen. Aangezien we in de eerste twee hoofdstukken hebben vastgesteld dat ervaringen wel degelijk bestaan, moeten we concluderen dat methodologisch naturalisme onwaar is.

Tot slot stel ik dat het afhangt van welke ontologie van personen men aanhangt of subjectiviteit in de interpretatie van (S<sub>5</sub>) compatibel is met naturalisme.

Concluderend kan gesteld worden dat in ieder geval drie van de vijf definities van de subjectiviteit van ervaring niet compatibel zijn met naturalisme. Na het geven van mijn argumenten bespreek ik twee bekende objecties tegen mijn conclusie van incompatibiliteit, Lycans objectie en de identiteitstheorie, die ik beide voorzie van antwoord. Tot slot bespreek ik drie alternatieve theorieën die niet al te ver van methodologisch naturalisme afstaan, maar die wel compatibel zijn met subjectiviteit. Deze theorieën zouden een oplossing kunnen bieden voor het probleem in kwestie, maar het is onwaarschijnlijk dat de methodologisch naturalist deze alternatieven zou kunnen aanvaarden.